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File Copy

Q8VU48
ID Q8VU48 PRELIMINARY; PRT; 581 AA.
AC Q8VU48
DT 01-MAR-2002 (TReMBLrel. 20, Created)
DT 01-MAR-2002 (TReMBLrel. 20, Last sequence update)
DT 01-OCT-2002 (TReMBLrel. 22, Last annotation update)
DE Putative polymorphic membrane protein (Fragment)
OS Chlamydia psittaci (Chlamydia phila psittaci)
OC Bacteria; Chlamydiae; Chlamydiales; Chlamydiaceae; Chlamydia phila.
OX NCBI_TaxID=83554;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN-POS;
RA Laroucau K., Souriau A., Rodolakis A.;
RT "Isolation of a new pmp sequence and evidence of pmp polymorphism in serotype-1 Chlamydia psittaci strains";
RL Submitted (MAR-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF243419; AAL36963.1;
DR InterPro; IPR003368; Chlamydia_PMP.
DR Pfam; PF02415; DUF145; 1.
FT NON_TER 1
SQ SEQUENCE 581 AA; 62860 MW; CDDF3C98522E112F CRC64;
Query Match 1.1%; Score 10; DB 2; Length 581;
Best Local Similarity 100.0%; Pred. No. 1.1;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 685 AAFCOLFGKD 694
Db 351 AAFCOLFGKD 360
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RESULT 5
Q8VU57
ID Q8VU57 PRELIMINARY; PRT; 601 AA.
AC Q8VU57
DT 01-MAR-2002 (TReMBLrel. 20, Created)
DT 01-MAR-2002 (TReMBLrel. 20, Last sequence update)
DT 01-MAR-2003 (TReMBLrel. 23, Last annotation update)
DE Putative polymorphic membrane protein (Fragment)
OS Chlamydia psittaci (Chlamydia phila psittaci)
OC Bacteria; Chlamydiae; Chlamydiales; Chlamydiaceae; Chlamydia phila.
OX NCBI_TaxID=83554;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN-POS, and LIG;
RA Laroucau K., Souriau A., Rodolakis A.;
RT "Isolation of a new pmp sequence and evidence of pmp polymorphism in serotype-1 Chlamydia psittaci strains";
RL Submitted (MAR-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF243416; AAL36960.1;
DR EMBL; AF243417; AAL36961.1;
DR InterPro; IPR006315; Autotransport.
DR InterPro; IPR003368; Chlamydia_PMP.
DR Pfam; PF02415; DUF145; 1.
DR TIGRFAMS; TIGR01414; autotrans_bar1; 1.
FT NON_TER 1
SQ SEQUENCE 601 AA; 65476 MW; D6AA97EC9072C757 CRC64;
Query Match 1.1%; Score 10; DB 2; Length 601;
Best Local Similarity 100.0%; Pred. No. 1.1;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 685 AAFCOLFGKD 694
Db 351 AAFCOLFGKD 360
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RESULT 6
Q8VU49
ID Q8VU49 PRELIMINARY; PRT; 602 AA.
AC Q8VU49
DT 01-MAR-2002 (TReMBLrel. 20, Created)

Q8VU48
ID Q8VU48 PRELIMINARY; PRT; 649 AA.
AC Q8VU48
DT 01-FEB-1997 (TReMBLrel. 02, Created)
DT 01-FEB-1997 (TReMBLrel. 02, Last sequence update)
DT 01-MAR-2003 (TReMBLrel. 23, Last annotation update)
DE Putative outer membrane protein (Fragment)
OS Chlamydia phila abortus.
OC Bacteria; Chlamydiae; Chlamydiales; Chlamydiaceae; Chlamydia phila.
OX NCBI_TaxID=83555;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN-ovine abortion S26/3;
RA Longbottom D., Russell M., Dunbar S.M., Jones G.E., Herring A.J.;
RT "98kDa protein genes from ovine abortion strain S26/3 Chlamydia psittaci";
RL Submitted (SEP-1996) to the EMBL/GenBank/DBJ databases.
DR EMBL; U72499; AAB18187.1;
DR InterPro; IPR006315; Autotransport.
DR InterPro; IPR003368; Chlamydia_PMP.
DR Pfam; PF02415; DUF145; 1.
DR TIGRFAMS; TIGR01414; autotrans_bar1; 1.
FT NON_TER 1
SQ SEQUENCE 649 AA; 70091 MW; 13747C68066A7F50 CRC64;
Query Match 1.3%; Score 12; DB 2; Length 649;
Best Local Similarity 100.0%; Pred. No. 0.011;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 646 GSNFFHKSTK 657
Db 366 GSNFFHKSTK 377
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RESULT 3
Q9RB70
ID Q9RB70 PRELIMINARY; PRT; 427 AA.
AC Q9RB70
DT 01-MAY-2000 (TReMBLrel. 13, Created)
DT 01-MAY-2000 (TReMBLrel. 13, Last sequence update)
DT 01-MAR-2003 (TReMBLrel. 23, Last annotation update)
DE Polymorphic outer membrane protein G family.
GN PMP_4_1
OS Chlamydia pneumoniae (Chlamydia phila pneumoniae).
OC Bacteria; Chlamydiae; Chlamydiales; Chlamydiaceae; Chlamydia phila.
OX NCBI_TaxID=83558;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN-J138;
RA MEDLINE=20330349; PubMed=10871362;
RA Shirai M., Hirakawa H., Kimoto M., Tabuchi M., Kishi F., Ouchi K.,
RA Shiba T., Ishii K., Hattori M., Kuhara S., Nakazawa T.;
RT "Comparison of whole genome sequences of Chlamydia pneumoniae J138 from Japan and CWL029 from USA";
RL Nucleic Acids Res. 28:2311-2314 (2000).
DR EMBL; AP002545; BAA98227.1;
DR InterPro; IPR003368; Chlamydia_PMP.
DR Pfam; PF02415; DUF145; 1.
DR TIGRFAMS; TIGR01376; POMP-repeat; 6.
SQ SEQUENCE 427 AA; 43419 MW; AB4BBBC1594DD2B1 CRC64;
Query Match 1.1%; Score 10; DB 16; Length 427;
Best Local Similarity 100.0%; Pred. No. 0.79; Indels 0; Gaps 0;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 416 IVFGEKLS 425
Db 416 IVFGEKLS 421
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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: August 22, 2003, 15:43:16 ; Search time 32 Seconds
(without alignments)
1227.015 Million cell updates/sec

Title: US-09-857-128-14
Perfect score: 928
Sequence: 1 MKSSLHWFLISSLALPLSL.....MEIRSSRSYNADLGCKTQF 928

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 328717 seqs, 42310858 residues

Word size: 0

Total number of hits satisfying chosen parameters: 328717

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 50 summaries

Database: Issued_Patents_AA:*

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- 2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep.*
- 3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep.*
- 4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep.*
- 5: /cgn2_6/ptodata/1/iaa/PTUS_COMB.pep.*
- 6: /cgn2_6/ptodata/1/iaa/backfiles1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	426	45.9	927	4	US-09-198-452A-472
2	16	1.7	930	4	US-09-198-452A-470
3	12	1.3	507	4	US-09-198-452A-32
4	10	1.1	199	4	US-09-198-452A-26
5	10	1.1	427	4	US-09-198-452A-31
6	10	1.1	527	4	US-09-198-452A-29
7	10	1.1	643	4	US-09-198-452A-474
8	9	1.0	494	4	US-09-198-452A-33
9	9	1.0	671	4	US-09-198-452A-468
10	9	1.0	982	4	US-09-556-877-176
11	9	1.0	982	4	US-09-620-412C-176
12	9	1.0	982	4	US-09-598-419-176
13	9	1.0	1006	4	US-09-556-877-190
14	9	1.0	1006	4	US-09-620-412C-190
15	9	1.0	1006	4	US-09-598-419-190
16	9	1.0	1132	4	US-09-198-452A-466
17	8	0.9	172	4	US-09-198-452A-368
18	8	0.9	446	4	US-09-252-991A-17185
19	8	0.9	483	4	US-09-198-452A-27
20	8	0.9	530	4	US-09-198-452A-482
21	8	0.9	609	4	US-09-198-452A-579
22	8	0.9	866	4	US-09-556-877-189
23	8	0.9	866	4	US-09-620-412C-189
24	8	0.9	866	4	US-09-598-419-189
25	8	0.9	880	4	US-09-556-877-175
26	8	0.9	880	4	US-09-620-412C-175
27	8	0.9	880	4	US-09-598-419-175

28	8	0.9	922	4	US-09-198-452A-15	Sequence 15, Appl
29	7	0.8	41	4	US-08-675-499A-12	Sequence 12, Appl
30	7	0.8	46	3	US-09-257-218-10	Sequence 10, Appl
31	7	0.8	46	3	US-09-311-760-10	Sequence 10, Appl
32	7	0.8	46	4	US-08-865-579-10	Sequence 10, Appl
33	7	0.8	46	4	US-10-059-749-10	Sequence 10, Appl
34	7	0.8	56	3	US-09-177-249-166	Sequence 166, Appl
35	7	0.8	73	4	US-09-345-238B-88	Sequence 88, Appl
36	7	0.8	86	4	US-09-198-452A-1279	Sequence 1279, Ap
37	7	0.8	123	4	US-09-252-991A-28665	Sequence 28665, A
38	7	0.8	135	4	US-09-252-991A-27134	Sequence 27134, A
39	7	0.8	141	4	US-09-252-991A-21958	Sequence 21958, A
40	7	0.8	154	4	US-09-198-452A-467	Sequence 467, App
41	7	0.8	161	3	US-09-413-814-15	Sequence 15, Appl
42	7	0.8	230	4	US-09-252-991A-33122	Sequence 33122, A
43	7	0.8	244	3	US-09-003-287-6	Sequence 6, Appl
44	7	0.8	244	3	US-09-003-287-8	Sequence 8, Appl
45	7	0.8	244	3	US-09-518-988-2	Sequence 2, Appl
46	7	0.8	253	4	US-09-252-991A-21300	Sequence 21300, A
47	7	0.8	265	3	US-08-483-857-8	Sequence 8, Appl
48	7	0.8	271	6	5175255-1	Patent No. 5175255
49	7	0.8	302	3	US-08-965-600-3	Sequence 3, Appl
50	7	0.8	302	4	US-09-489-506-3	Sequence 3, Appl

ALIGNMENTS

RESULT 1

US-09-198-452A-472
; Sequence 472, Application US/09198452A
; Patent No. 6559294

GENERAL INFORMATION:

APPLICANT: Grifffais, R.
TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragr
; thereof and uses thereof, in particular for the diagnosis, frag
; TITLE OF INVENTION: and treatment of infection
FILE REFERENCE: 9710-003-999
CURRENT APPLICATION NUMBER: US/09/198,452A
CURRENT FILING DATE: 1998-11-24
NUMBER OF SEQ ID NOS: 6849
SEQ ID NO 472
LENGTH: 927
TYPE: PRT

ORGANISM: Chlamydia pneumoniae

FEATURE:

NAME/KEY: SITE
LOCATION: 1...927
OTHER INFORMATION: xaa-unknown or other
US-09-198-452A-472

Query Match 45.9%; Score 426; DB 4; Length 927;

Best Local Similarity 100.0%; Pred. No. 0;

Matches 426; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY	503	TLKATQASOTVTLGSLVDPGNYVEDVSWNNPQVFSCLTLTADDPANIHITDLAADP	562
Db	502	TLKATQASOTVTLGSLVDPGNYVEDVSWNNPQVFSCLTLTADDPANIHITDLAADP	561
QY	563	LEKNPIHWGYQGNWALSQEDATKSKAATLTWTKGYNPNPERRGTLVANTLWGSFVDV	622
Db	562	LEKNPIHWGYQGNWALSQEDATKSKAATLTWTKGYNPNPERRGTLVANTLWGSFVDV	621
QY	623	RSIQQLVAVKVRQSQETRGVCEGINSFPHKDKSTKINKGRHRHSAGYVVGATTTLASDNL	682
Db	622	RSIQQLVAVKVRQSQETRGVCEGINSFPHKDKSTKINKGRHRHSAGYVVGATTTLASDNL	681
QY	683	ITAAFCQLGKGRDHFINKNRASAYAAASHLOHLATLSSPLLRYLPGSESEOPVLFDAQ	742
Db	682	ITAAFCQLGKGRDHFINKNRASAYAAASHLOHLATLSSPLLRYLPGSESEOPVLFDAQ	741
QY	743	ISYIYSKNTMYTQAPKGESSWYNDGCALELSSPLHTALSGHEGLHFAYFFPKVEAS	802

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Db 742 ISYISKNTKTYTQAPKGSSWYNDGCALESSLPHLTALSHGLFHAYFPFKVEAS 801
QY 803 YIHDSFKERNITLVRSFSDGLINVSVPIGITPFERSRNERASYEATVIYVADYRKNP 862
Db 802 YIHDSFKERNITLVRSFSDGLINVSVPIGITPFERSRNERASYEATVIYVADYRKNP 861
QY 863 DCTTALLNNNTSKWTTGTLNLSRQAGIGRAGIFYAFSPNLEVTNLSMEIRGSSRSYNADL 922
Db 862 DCTTALLNNNTSKWTTGTLNLSRQAGIGRAGIFYAFSPNLEVTNLSMEIRGSSRSYNADL 921
QY 923 GKGQF 928
Db 922 GKGQF 927

RESULT 2

US-09-198-452A-470
; Sequence 470, Application US/09198452A

; Patent No. 6559294

; GENERAL INFORMATION:

; APPLICANT: Griffais, R.

; TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragments thereof and uses thereof, in particular for the diagnosis, prevention and treatment of infection

; FILE REFERENCE: 9710-003-999

; CURRENT APPLICATION NUMBER: US/09/198,452A

; NUMBER OF SEQ ID NOS: 6849

; SEQ ID NO 470

; LENGTH: 930

; TYPE: PRT

; ORGANISM: Chlamydia pneumoniae

US-09-198-452A-470

Query Match 1.7%; Score 16; DB 4; Length 930;
Best Local Similarity 100.0%; Pred. No. 7.9e-07;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 319 GGAIAADSGSLSLA 334

Db 324 GGAIAADSGSLSLA 339

RESULT 3

US-09-198-452A-32

; Sequence 32, Application US/09198452A

; Patent No. 6559294

; GENERAL INFORMATION:

; APPLICANT: Griffais, R.

; TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragments thereof and uses thereof, in particular for the diagnosis, prevention and treatment of infection

; FILE REFERENCE: 9710-003-999

; CURRENT APPLICATION NUMBER: US/09/198,452A

; NUMBER OF SEQ ID NOS: 6849

; SEQ ID NO 32

; LENGTH: 507

; TYPE: PRT

; ORGANISM: Chlamydia pneumoniae

US-09-198-452A-32

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Best Local Similarity 100.0%; Pred. No. 0.0038;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 615 LMGSFVDVRSIQ 626

Db 199 LMGSFVDVRSIQ 210

RESULT 4

US-09-198-452A-26

; Sequence 26, Application US/09198452A

; Patent No. 6559294

; GENERAL INFORMATION:

; APPLICANT: Griffais, R.

; TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragments thereof and uses thereof, in particular for the diagnosis, prevention and treatment of infection

; FILE REFERENCE: 9710-003-999

; CURRENT APPLICATION NUMBER: US/09/198,452A

; NUMBER OF SEQ ID NOS: 6849

; SEQ ID NO 26

; LENGTH: 199

; TYPE: PRT

; ORGANISM: Chlamydia pneumoniae

US-09-198-452A-26

Query Match 1.1%; Score 10; DB 4; Length 199;
Best Local Similarity 100.0%; Pred. No. 0.14;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 319 GGAIAADSG 328

Db 70 GGAIAADSG 79

RESULT 5

US-09-198-452A-31

; Sequence 31, Application US/09198452A

; Patent No. 6559294

; GENERAL INFORMATION:

; APPLICANT: Griffais, R.

; TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragments thereof and uses thereof, in particular for the diagnosis, prevention and treatment of infection

; FILE REFERENCE: 9710-003-999

; CURRENT APPLICATION NUMBER: US/09/198,452A

; NUMBER OF SEQ ID NOS: 6849

; SEQ ID NO 31

; LENGTH: 427

; TYPE: PRT

; ORGANISM: Chlamydia pneumoniae

US-09-198-452A-31

Query Match 1.1%; Score 10; DB 4; Length 427;
Best Local Similarity 100.0%; Pred. No. 0.3;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 416 IVFSGEKLSE 425

Db 412 IVFSGEKLSE 421

RESULT 6

US-09-198-452A-29

; Sequence 29, Application US/09198452A

; Patent No. 6559294

; GENERAL INFORMATION:

; APPLICANT: Griffais, R.

; TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragments thereof and uses thereof, in particular for the diagnosis, prevention and treatment of infection

; FILE REFERENCE: 9710-003-999

; CURRENT APPLICATION NUMBER: US/09/198,452A

; NUMBER OF SEQ ID NOS: 6849

; SEQ ID NO 29

; LENGTH: 597

; TYPE: PRT

; ORGANISM: Chlamydia pneumoniae

US-09-198-452A-29

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OM protein - protein search, using sw model

Run on: August 22, 2003, 15:28:55 ; Search time 32 Seconds
(without alignments)
1227.015 Million cell updates/sec.

Title: US-09-857-128-14

Perfect score: 4759

Sequence: 1 MKSSLHWFLISSSLALPLSL.....MEIRGSSRSYNADLGKRFQF 928

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 328717 seqs, 42310858 residues

Total number of hits satisfying chosen parameters: 328717

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 50 summaries

Database :

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- 3: /cgn2_6/ptodata/1/1aa/6A_COMB.pep.*
- 4: /cgn2_6/ptodata/1/1aa/6B_COMB.pep.*
- 5: /cgn2_6/ptodata/1/1aa/PCTUS_COMB.pep.*
- 6: /cgn2_6/ptodata/1/1aa/backfiles.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	4646.5	97.6	927	4	US-09-198-452A-472
2	1951	41.0	930	4	US-09-198-452A-470
3	1789	37.6	949	4	US-09-198-452A-478
4	1436	30.2	643	4	US-09-198-452A-474
5	1431	30.1	922	4	US-09-198-452A-15
6	1287.5	27.1	597	4	US-09-198-452A-29
7	1201.5	25.2	671	4	US-09-198-452A-468
8	1111	23.3	507	4	US-09-198-452A-32
9	1085	22.8	1132	4	US-09-198-452A-466
10	993.5	20.9	1006	4	US-09-556-877-190
11	993.5	20.9	1006	4	US-09-620-412C-190
12	993.5	20.9	1006	4	US-09-598-419-190
13	991.5	20.8	982	4	US-09-556-877-176
14	991.5	20.8	982	4	US-09-620-412C-176
15	991.5	20.8	982	4	US-09-598-419-176
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17	944.5	19.8	880	4	US-09-620-412C-175
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20	925.5	19.4	866	4	US-09-620-412C-189
21	925.5	19.4	866	4	US-09-598-419-189
22	873	18.3	450	4	US-09-198-452A-35
23	821	17.3	427	4	US-09-198-452A-31
24	813.5	17.1	494	4	US-09-198-452A-33
25	803.5	16.9	530	4	US-09-198-452A-482
26	770	16.2	483	4	US-09-198-452A-27
27	665	14.0	940	4	US-09-198-452A-500

28	652	13.7	1617	4	US-09-198-452A-1035	Sequence 1035, Ap
29	626.5	13.2	1146	4	US-09-198-452A-580	Sequence 580, App
30	621.5	13.1	294	4	US-09-198-452A-469	Sequence 469, App
31	600.5	12.6	969	4	US-09-198-452A-501	Sequence 501, App
32	574	12.1	964	4	US-09-556-877-177	Sequence 177, App
33	574	12.1	964	4	US-09-620-412C-177	Sequence 177, App
34	574	12.1	964	4	US-09-598-419-177	Sequence 177, App
35	557.5	11.7	977	4	US-09-556-877-191	Sequence 191, App
36	557.5	11.7	977	4	US-09-620-412C-191	Sequence 191, App
37	557.5	11.7	977	4	US-09-598-419-191	Sequence 191, App
38	557	11.7	822	4	US-09-198-452A-506	Sequence 506, App
39	534.5	11.7	519	4	US-09-198-452A-479	Sequence 479, App
40	543.5	11.4	1530	4	US-09-556-877-178	Sequence 178, App
41	543.5	11.4	1530	4	US-09-620-412C-178	Sequence 178, App
42	543.5	11.4	1530	4	US-09-598-419-178	Sequence 178, App
43	534	11.2	660	4	US-09-198-452A-578	Sequence 578, App
44	504.5	10.6	1776	4	US-09-556-877-179	Sequence 179, App
45	504.5	10.6	1776	4	US-09-620-412C-179	Sequence 179, App
46	504.5	10.6	1776	4	US-09-598-419-179	Sequence 179, App
47	492.5	10.3	230	4	US-09-198-452A-30	Sequence 30, Appl
48	490	10.3	1752	4	US-09-556-877-180	Sequence 180, App
49	490	10.3	1752	4	US-09-620-412C-180	Sequence 180, App
50	490	10.3	1752	4	US-09-598-419-180	Sequence 180, App

ALIGNMENTS

RESULT 1

US-09-198-452A-472
; Sequence 472, Application US/09198452A
; Patent No. 6559294

; GENERAL INFORMATION:

; APPLICANT: Griffiths, R.

; TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, frag
; thereof and uses thereof, in particular for the diagnosis
; TITLE OF INVENTION: and treatment of infection

; FILE REFERENCE: 9710-003-999

; CURRENT APPLICATION NUMBER: US/09/198,452A

; CURRENT FILING DATE: 1998-11-24

; NUMBER OF SEQ ID NOS: 6849

; SEQ ID NO 472

; LENGTH: 927

; TYPE: PRT

; ORGANISM: Chlamydia pneumoniae

; NAME/KEY: SITE

; LOCATION: 1...927

; OTHER INFORMATION: Xaa-unknown or other

US-09-198-452A-472

Query Match

Best Local Similarity 97.6%; Score 4646.5; DB 4; Length 927;

Matches 909; Conservative 6; Mismatches 12; Indels 1; Gaps 1;

Qy	1	MKSSLHWFLISSSLALPLSLNFSAFAAFAVVEINLPTNSFGPGTYTTPPAQTNDAGTIYN	60
Db	1	MKSSLHWFLISSSLALPLSLNFSAFAAFAVVEINLPTNSFGPGTYTTPPAQTNDAGTIYN	60
Qy	61	LTGDSVITNAGSPALTATSCFKETTNLSPFGHGYQFLLQNDAGANCTFTNTAANKLLS	120
Db	61	LTGDSVITNAGSPALTATSCFKETTNLSPFGHGYQFLLQNDAGANCTFTNTAANKLLS	120
Qy	121	FSGFSVLSLIQTNTATGTGAIKSTGACSTQSNVSCYFGNFSNDNGALQGSSISLSLN	180
Db	121	FSGFSVLSLIQTNTATGTGAIKSTGACSTQSNVSCYFGNFSNDNGALQGSSISLSLN	180
Qy	181	PNLTFARNKATOKGGALYSTGGITINNTLNSAFSENATNNGGAIYTEASSFTSSNKAI	240
Db	181	PNLTFARNKATOKGGALYSTGGITINNTLNSAFSENATNNGGAIYTEASSFTSSNKAI	240
Qy	241	SFINNSVTATSGGAIYCSTSPAKPVLTLSDNGELNFIQNTAITSGGAIYTDNLVLS	300
Db	241	SFINNSVTATSGGAIYCSTSPAKPVLTLSDNGELNFIQNTAITSGGAIYTDNLVLS	300

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Db 241 SFINNSVTATSGAGIYCSSTAPKPVLTLDNGELNFTGNTATISGGAIYTDNLVLSS 300
 Qy 301 GGTLEKNNGYDTAAPLGAIAIADSGSLSLALGDDITFEQNTVVKGASSQTTRNS 360
 Db 301 GGTLEKNNSAIDTAAPLGAIAIADSGSLSLALGDDITFEQNTVVKGASSQTTRNS 360
 Qy 361 INIGNTNAKIVOLRASQGNITFYDPITTSITAAALSDALNGLNPGDLAGNPAYQGTIVFSG 420
 Db 361 INIGNTNAKIVOLRASQGNITFYDPITTSITAAALSDALNGLNPGDLAGNPAYQGTIVFSG 420
 Qy 421 EKLSEAEAAEADNLKSTIOOPLTAGGQLSLKSGVTLVAKSPQSPGSLLDAGTTLET 480
 Db 421 EKLSEAEAAEADNLKSTIOOPLTAGGQLSLKSGVTLVAKSPQSPGSLLDAGTTLET 480
 Qy 481 ADGTTNNLVNDSLKETKKTGLKATQASQTVTLSSLSLVDPSGNYVEDYSWNNPQVF 540
 Db 481 ADG-TLSITCSQCFRLKDOEATKATQASQTVTLSSLSLVDPSGNYVEDYSWNNPQVF 539
 Qy 541 SCLTLTADDPANHTDLAADPLEKNPIHWGYOGNALSQWEDTATKSKAAATLTWTKGY 600
 Db 540 SCLTLTADDPANHTDLAADPLEKNPIHWGYOGNALSQWEDTATKSKAAATLTWTKGY 599
 Qy 601 NNPERRGTLVANTLWGSFVDRSICQLVATKVRQSOETRGITWCEGINSFHHKSTKINK 660
 Db 600 NNPERRGTLVANTLWGSFVDRSICQLVATKVRQSOETRGITWCEGINSFHHKSTKINK 659
 Qy 661 GFRHISAGVVGATTLASDNLTAAFCOLFKDRDHFINKRAYSAYASLHQLATLS 720
 Db 660 GFRHISAGVVGATTLASDNLTAAFCOLFKDRDHFINKRAYSAYASLHQLATLS 719
 Qy 721 SPSSLRLYPGSESEQVPLFDAQISYISKNTMKTYTQAPKCESSWYNDGCALASSLP 780
 Db 720 SPSSLRLYPGSESEQVPLFDAQISYISKNTMKTYTQAPKCESSWYNDGCALASSLP 779
 Qy 781 HTALSHGELFHAYFPFIKVEASYIHQDSFKERNITLVRSDGDLINVSPIGIFERFS 840
 Db 780 HTALSHGELFHAYFPFIKVEASYIHQDSFKERNITLVRSDGDLINVSPIGIFERFS 839
 Qy 841 RNERASYEATVIYADVVRKPNDCPTALLINNTSKWTTGTNLSROAGIGRAGIFYAFSPN 900
 Db 840 RNERASYEATVIYADVVRKPNDCPTALLINNTSKWTTGTNLSROAGIGRAGIFYAFSPN 899
 Qy 901 LEVTSNLSMEIRGSSRSYNADLGGKQF 928
 Db 900 LEVTSNLSMEIRGSSRSYNADLGGKQF 927

RESULT 2
 US-09-198-452A-470
 Sequence 470, Application US/09198452A
 Patent No. 6559294
 GENERAL INFORMATION:
 APPLICANT: Grifais, R.
 TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragments thereof and uses thereof, in particular for the diagnosis, prevention and treatment of infection
 FILE REFERENCE: 9710-003-999
 CURRENT APPLICATION NUMBER: US/09/198,452A
 CURRENT FILING DATE: 1998-11-24
 NUMBER OF SEQ ID NOS: 5849
 SEQ ID NO 470
 LENGTH: 930
 TYPE: PRN
 ORGANISM: Chlamydia pneumoniae
 US-09-198-452A-470
 Query Match 41.0%; Score 1951; DB 4; Length 930;
 Best Local Similarity 44.0%; Pred. No. 7,9e-145;
 Matches 418; Conservative 166; Mismatches 324; Indels 42; Gaps 20;
 Qy 1 MKSLHWFLLSSIALPLSLNFAAIVEINLGNPTNSFGPG--TYTPPAQTTNADGTI 58
 Db 1 MKIPLHKLISSTLVTPLLSIATYGA--DASLSPTDSFDGAGGSGTFTPKS-TADANGTN 57

Qy 59 YNLGDSVITNAGSPALTASCFTTGNLSFOGHGYOFLQONIDAGNC-TFTNTAANK 117
 Db 58 YVLSGNVINDAGKGTALTGCCTFTTGDLTFTGKGYSFSTVTVVADGSGNAGAAATTDK 117
 Qy 118 LLSFGFYSLSLIOT--TNATGTGAIKSTGACISQSNYSYFGONFSD---NGGALQG 172
 Db 118 ALTFTGFSNLSFIAAPGTTVASKGKTLSSAGALNLTNDGTILFSQNVSNNEANGGAI 177
 Qy 173 SSISLSLN-PNLTFAKNKATQGGALYSTGGTITNTLNSAFSSENTAANGGAIYTRAS 231
 Db 178 KTLISGNTSSITFTTSNKAAGLGGAIYSSAAASISGNTGOLVFMNKGTTGGALGFAS 237
 Qy 232 SFISNKAISFINNSVTATSGAGIYCSSTAPKPVLTLDNGELNFTGNTATISGGAI 291
 Db 238 SSITONSSLSFGNTATDAAGKGGAIYEKT-GETPTLTISGNKSLTFAENSSVTVGGAI 296
 Qy 292 YTDNLVSSGPTLTKNNSGYDTAAPLGAIAIADSGSLSLALGDDITFEQNTVVKAS 351
 Db 297 CAHGLDLAAAGPTLFSNNRCGNTAAGKGAIAIADSGSLSLANQDITFLGNTLT--ST 354
 Qy 352 SSOTTRNSINIGNTNAKIVOLRASQGNITFYDPITTSITAAALSDALNGLNPGDLAGNPA 411
 Db 355 SAPSTRNAYILG-SSAKITNLRAAQGSIIFYDPIASNTTGA-SDVLTINQDPSNSPLD 412
 Qy 412 YOGTIVFSGEKLSEAEAAEADNLKSTIOOPLTAGGQLSLKSGVTLVAKSFQSPGSTALL 471
 Db 413 YSGTIVFSGEKLSEAEAAEADNLKSTIOOPLTAGGQLSLKSGVTLVAKSFQSPGSTALL 472
 Qy 472 MDAGTTLET-ADGTTNNLVNDSLKETKKTGLKATQASQTVTLSSLSLVDPSGNYVE 530
 Db 473 MOPGTKLADTEATLSLTKLVVDLSALEGNKSVSIETAGANKTITLTVLFDSSGNYFE 532
 Qy 531 DVSNWNP-----QVFSCLTLTADDPANHTDLAADPLEKNPIHWGYOGNALSQWEDTA 585
 Db 533 SHTINQAFQPLVFTVTAATAASD----IYDALLTSPVOTPEPHYGYOGHWEATW-ADTS 587
 Qy 586 TKSKAATLTWTKTYGNPNPERRGTLVANTLWGSFVDRSICQLVATKVRQSOETRGIMCE 645
 Db 588 T-AKSGTMTWTTGTYNPNERRASVVPDLSWASFTDITLQOIMTSQANSIYQOGLWAS 646
 Qy 646 GISNFFHKDSKINKGPRHISAGIYVVGATTLASDNLTAAFCOLFKDRDHFINKRAYS 705
 Db 647 GTANFFHKDSKINKGPRHISAGIYVVGATTLASDNLTAAFCOLFKDRDHFINKRAYS 706
 Qy 706 AYAASLHLOH---LATLSSPSLLRYLPGSESEQ-----PVLFDQAQISYISKNTMKTYTQ 758
 Db 707 NYLASLYLQHRAFLGGLPMPSPF---GSITDMLKDIPILINAQLSYTNDMDTRTYS 761
 Qy 759 APKGESSWYNDGCALASSLPHTALSHEGLFHAYFPFIKVEASYIHQDSFKERNITLVR 818
 Db 762 YPEAGGSWYNDGCALASSLPHTALSHEGLFHAYFPFIKVEASYIHQDSFKERNITLVR 820
 Qy 819 SFDSGDLINVSPIGIFERFSRNERASYEATVIYADVVRKPNDCPTALLINNTSKWTT 878
 Db 821 AFDDGDLVNSIPVIRLEKISEKKNFELSAYIGDVYRKNRPSRSLVMSASWTSLS 880
 Qy 879 GTNLSROAGIGRAGIFYAFSPNLEVTNLSMEIRGSSRSYNADLGGKQF 928
 Db 881 CKNLARQAFLASAGSHLTLSPHVELSGEAAAYELRGAHIYVNDGCLRYSP 930

RESULT 3
 US-09-198-452A-478
 Sequence 478, Application US/09198452A
 Patent No. 6559294
 GENERAL INFORMATION:
 APPLICANT: Grifais, R.
 TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragments thereof and uses thereof, in particular for the diagnosis, prevention and treatment of infection
 FILE REFERENCE: 9710-003-999
 CURRENT APPLICATION NUMBER: US/09/198,452A

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OM nucleic - nucleic search, using sw model

Run on: August 24, 2003, 10:40:22 ; Search time 128.664 Seconds
(without alignments)
9550.532 Million cell updates/sec

Title: US-09-857-128-6
Perfect score: 2784
Sequence: 1 atgaatactctcttcattg.....ttggaggtaagttccagttc 2784

Scoring table: IDENTITY_NUC
Gapop 10_0 , Gapext 1.0

Searched: 569978 seqs, 220691566 residues

total number of hits satisfying chosen parameters: 1139956

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 50 summaries

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- 3: /cgn2_6/ptodata/2/ina/6A_COMB.seq.*
- 4: /cgn2_6/ptodata/2/ina/6B_COMB.seq.*
- 5: /cgn2_6/ptodata/2/ina/PCUS_COMB.seq.*
- 6: /cgn2_6/ptodata/2/ina/backfiles.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	2734.2	98.2	1230025	4	US-09-198-452A-1
2	510.8	18.3	1230025	4	US-09-198-452A-1
3	95.8	3.4	3021	4	US-09-556-877-182
4	95.8	3.4	3021	4	US-09-620-412C-182
5	95.8	3.4	3021	4	US-09-598-419-182
6	95	3.4	2949	4	US-09-556-877-170
7	95	3.4	2949	4	US-09-620-412C-170
8	95	3.4	2949	4	US-09-598-419-170
9	49.2	1.8	2601	4	US-09-556-877-181
10	49.2	1.8	2601	4	US-09-620-412C-181
11	49.2	1.8	2601	4	US-09-598-419-181
12	49.2	1.8	2643	4	US-09-556-877-169
13	49.2	1.8	2643	4	US-09-620-412C-169
14	49.2	1.8	2643	4	US-09-598-419-169
15	41.2	1.5	7218	1	US-08-232-463-14
16	37.2	1.3	2076	4	US-09-620-412C-312
17	37.2	1.3	2076	4	US-09-598-419-312
18	36.6	1.3	1752	4	US-09-620-412C-352
19	36.6	1.3	1752	4	US-09-598-419-352
20	36.6	1.3	2466	4	US-09-556-877-187
21	36.6	1.3	2466	4	US-09-620-412C-187
22	36.6	1.3	5331	4	US-09-598-419-187
23	36.6	1.3	5331	4	US-09-556-877-173
24	36.6	1.3	5331	4	US-09-620-412C-173
25	36.6	1.3	5331	4	US-09-598-419-173
26	35.6	1.3	1860	4	US-09-620-412C-308
27	35.6	1.3	1860	4	US-09-598-419-308

28	35.6	1.3	1940	4	US-08-936-165A-251	Sequence 251, App
29	35.2	1.3	3087	4	US-09-328-352-1623	Sequence 1623, Ap
c	34.4	1.2	1314	4	US-09-134-001C-581	Sequence 581, App
31	34.4	1.2	1896	4	US-09-620-412C-324	Sequence 324, App
32	34.4	1.2	1896	4	US-09-598-419-324	Sequence 324, App
33	33.8	1.2	6733	3	US-09-124-541-2	Sequence 2, Appli
c	33.6	1.2	1023	4	US-09-107-532A-1585	Sequence 1585, Ap
c	33.6	1.2	1664976	4	US-08-916-421B-1	Sequence 1, Appli
35	33.4	1.2	630	4	US-09-439-313-358	Sequence 358, App
37	33.4	1.2	630	4	US-09-352-616A-358	Sequence 358, App
38	33.4	1.2	5738	1	US-08-409-995-3	Sequence 3, Appli
39	33.4	1.2	5738	3	US-08-685-467-3	Sequence 3, Appli
40	33.4	1.2	7253	4	US-09-268-347-35	Sequence 35, Appli
41	33.4	1.2	7291	3	US-08-913-942-3	Sequence 3, Appli
42	33.4	1.2	1830121	4	US-09-557-884-1	Sequence 1, Appli
43	33.4	1.2	1830121	4	US-09-643-990A-1	Sequence 1, Appli
c	33.2	1.2	2192	3	US-08-942-001-1	Sequence 1, Appli
c	33.2	1.2	2192	3	US-09-337-385-1	Sequence 1, Appli
c	33.2	1.2	2192	4	US-09-846-922-1	Sequence 1, Appli
47	33	1.2	1684976	4	US-08-916-421B-1	Sequence 1, Appli
c	32.8	1.2	1200	1	US-08-357-264-2	Sequence 2, Appli
c	32.8	1.2	1200	1	US-08-672-514-2	Sequence 2, Appli
c	32.8	1.2	3087	4	US-09-328-352-1623	Sequence 1623, Ap

ALIGNMENTS

RESULT 1
US-09-198-452A-1
; Sequence 1, Application US/09198452A
; Patent No. 6559294
; GENERAL INFORMATION:
; APPLICANT: Grifais, R.
; TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragme
; TITLE OF INVENTION: thereof and uses thereof, in particular for the diagnosis, pr
; FILE OF INVENTION: and treatment of infection
; FILE REFERENCE: 9710-003-999
; CURRENT APPLICATION NUMBER: US/09/198,452A
; CURRENT FILING DATE: 1998-11-24
; NUMBER OF SEQ ID NOS: 6849
; SEQ ID NO 1
; LENGTH: 1230025
; TYPE: DNA
; ORGANISM: Chlamydia pneumoniae
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(15000)
; OTHER INFORMATION: n-a or c or g or t
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; OTHER INFORMATION: n-a or c or g or t
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LOCATION: (900001)..(915000)
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NAME/KEY: misc_feature

Query Match		98.2%;	Score 2734.2;	DB 4;	Length 1230025;
Best Local Similarity		99.6%;	Pred. No. 0;		
Matches 2772;		Conservative	0;	Mismatches	9;
				Indels	3;
				Gaps	3;
QY	1	ATGAAATCCTCTCTTCATGTTGTTTAAATCTGTCATCTTTAGCACCTTCCCTTGTGCTACTA	60		
DB	510660	ATGAAATCCTCTCTTCATGTTGTTTAAATCTGTCATCTTTAGCACCTTCCCTTGTGCTACTA	510719		
DB	61	AATTTCTCTGGTTGCTGCTGTTGTTGAAATCAATCTAGACCTTACCAATAGCTTCTCT	120		
DB	510720	AATTTCTCTGGTTGCTGCTGTTGTTGAAATCAATCTAGACCTTACCAATAGCTTCTCT	510779		
QY	121	GGACGAGAACTACACTCTCCAGCCCAACAAATGAGATGGAATCTATCTATAAT	180		
DB	510780	GGACGAGAACTACACTCTCCAGCCCAACAAATGAGATGGAATCTATCTATAAT	510839		
QY	181	CTACAGGGGATGTCCTCAATCACCAGATGCGAGATCTCCGAGCTCTAACCGCTTCTGTC	240		
DB	510840	CTACAGGGGATGTCCTCAATCACCAGATGCGAGATCTCCGAGCTCTAACCGCTTCTGTC	510899		
QY	241	TTTAAAGAACTACTGGGAATCTTTCTTCCAGCCGACGCTTACCAATAGCTTCTCTCC	300		
DB	510900	TTTAAAGAACTACTGGGAATCTTTCTTCCAGCCGACGCTTACCAATAGCTTCTCTCC	510959		
QY	301	AATATCGATGGGAGCGAACTGTTTACCAATACAGCTGCAAAATAGCTTCTCTCC	360		
DB	510960	AATATCGATGGGAGCGAACTGTTTACCAATACAGCTGCAAAATAGCTTCTCTCC	511019		
QY	361	TTTTCAGGATCTCTTATTTGCTACTAATACAAACAGATGCTACCAAGGAAACAGGA	420		
DB	511020	TTTTCAGGATCTCTTATTTGCTACTAATACAAACAGATGCTACCAAGGAAACAGGA	511079		
QY	421	GCCATCAAGTCCACAGGAGCTGTTCTATTTCAGTCGAACTATAGTTGCTACTTGGCCAA	480		
DB	511080	GCCATCAAGTCCACAGGAGCTGTTCTATTTCAGTCGAACTATAGTTGCTACTTGGCCAA	511139		
DB	481	AACCTTTCTTATGACAAATGGAGCGCCCTCCAAAGGAGCTCTATCAGTCTATCGCTAAAC	540		
DB	511140	AACCTTTCTTATGACAAATGGAGCGCCCTCCAAAGGAGCTCTATCAGTCTATCGCTAAAC	511199		
QY	541	CCCAACCTACGTTTGGCAAAACAAAGCAACGAAAGGGGTGCCCTTATTCACG	600		
DB	511200	CCCAACCTACGTTTGGCAAAACAAAGCAACGAAAGGGGTGCCCTTATTCACG	511259		
QY	601	GGAGGATTACAAATACAAATAGTTAACTACGATCATTTTCTGAAATACGGGGCG	660		
DB	511260	GGAGGATTACAAATACAAATAGTTAACTACGATCATTTTCTGAAATACGGGGCG	511319		
QY	661	AACAATGGCGGAGCCATTTACGCGAAGCTTAGCAGTTTATAGCAGCAACAAGCAAT	720		
DB	511320	AACAATGGCGGAGCCATTTACGCGAAGCTTAGCAGTTTATAGCAGCAACAAGCAAT	511379		
QY	721	AGCTTTATAAACAATAGTGTGACCGCAACCTCAGCTACAGGGGAGCCATTTACTGTAGT	780		
DB	511380	AGCTTTATAAACAATAGTGTGACCGCAACCTCAGCTACAGGGGAGCCATTTACTGTAGT	511439		
QY	781	AGTACATACGCCCCAAACAGCTTTAACTCTATACAGCAACGCGGAACTGAACTTTATA	840		
DB	511440	AGTACATACGCCCCAAACAGCTTTAACTCTATACAGCAACGCGGAACTGAACTTTATA	511499		
QY	841	GGAATACAGCAATTAAGTGTGGGGCGGATTTATAGTACAACTAGTCTCTCTCTCT	900		

DB	511500	GGAATACAGCAATTAAGTGTGGGGCGGATTTATAGTACCAATAGTCTCTCTCTCT	511559		
QY	901	GGAGGACCTAGCTTTTAAAAACAACCTCTGCTATGATACCTGACGCTCCCTTAGGAGGA	960		
DB	511560	GGAGGACCTAGCTTTTAAAAACAACCTCTGCTATGATACCTGACGCTCCCTTAGGAGGA	511619		
QY	961	GCAATTTGGATTGCTGACTCTGGATCTTTTGGCTCTTTGGCTTTGGTGGAGACATCACT	1020		
DB	511620	GCAATTTGGATTGCTGACTCTGGATCTTTTGGCTCTTTGGCTTTGGTGGAGACATCACT	511679		
QY	1021	TTTGAAGGAACACAGTAGTCAAAAGGAGCTTCTTGGAGTACAGACACCTACAGAAATCTCT	1080		
DB	511680	TTTGAAGGAACACAGTAGTCAAAAGGAGCTTCTTGGAGTACAGACACCTACAGAAATCTCT	511739		
QY	1081	ATTAACATCGGAAACACCAATGCTTAAGATTTACAGCTGCGAGCTCTCAAGGCAATCACT	1140		
DB	511740	ATTAACATCGGAAACACCAATGCTTAAGATTTACAGCTGCGAGCTCTCAAGGCAATCACT	511799		
QY	1141	ATCTACTTCTAATGATCTCTAATCAACATAGCATCACTGAGCTCTCTCAGATGCTCTAAAC	1200		
DB	511800	ATCTACTTCTAATGATCTCTAATCAACATAGCATCACTGAGCTCTCTCAGATGCTCTAAAC	511859		
QY	1201	TTAATGCTCTGACCTTGCAGGGAATCTCTGATATCAAGGAACCATGCTATTTCTGGA	1260		
DB	511860	TTAATGCTCTGACCTTGCAGGGAATCTCTGATATCAAGGAACCATGCTATTTCTGGA	511919		
QY	1261	GAGAAGCTCTCGGAAGCAGAGCTGCAAGAGCTGATAATCTCAAACTTACAAATTCAGCAA	1320		
DB	511920	GAGAAGCTCTCGGAAGCAGAGCTGCAAGAGCTGATAATCTCAAACTTACAAATTCAGCAA	511979		
QY	1321	CCTCTACTCTTGGGGAGGCAACTCTCTCTTAAATCAGGAGTCACTTCTAGTGTCTAAG	1380		
DB	511980	CCTCTACTCTTGGGGAGGCAACTCTCTCTTAAATCAGGAGTCACTTCTAGTGTCTAAG	512039		
QY	1381	TCCTTTTCGCAATCTCCGGCTCTACCTCTCTGATGATGATGATGATGATGATGATGATG	1440		
DB	512040	TCCTTTTCGCAATCTCCGGCTCTACCTCTCTGATGATGATGATGATGATGATGATGATG	512099		
QY	1441	GCTGATGGGATCACTATCAATAATCTTGTCTCAATGATGATGATGATGATGATGATGATG	1500		
DB	512100	GCTGAT - GGATCACTATCAATAATC - TGTTCTCAATGATGATGATGATGATGATGATG	512157		
QY	1501	AAGGCAAGCTTAAAGCAACAGCAAGTCAAGTCACTACTTCTGATGATGATGATGATGATG	1560		
DB	512158	AA - GNTACGCTTAAAGCAACAGCAAGTCAAGTCACTACTTCTGATGATGATGATGATG	512216		
QY	1561	CTTGTAGATCTTCTGGAATGCTAGGAAGTCTCTTGGATATACCTCAAGTCTCTT	1620		
DB	512217	CTTGTAGATCTTCTGGAATGCTAGGAAGTCTCTTGGATATACCTCAAGTCTCTT	512276		
QY	1621	TCCTGTCTCACTTCTGCTGACGACCCCGCAATATTCACATCACTCACTTACTGCTCT	1680		
DB	512277	TCCTGTCTCACTTCTGCTGACGACCCCGCAATATTCACATCACTCACTTACTGCTCT	512336		
QY	1681	GATCCCTAGAAAAAATCTCTATCCATTTGGGATACCAAGGAATTTGGGATTTCTTGG	1740		
DB	512337	GATCCCTAGAAAAAATCTCTATCCATTTGGGATACCAAGGAATTTGGGATTTCTTGG	512396		
QY	1741	CAGAGGATCTCGGACTTAATCCAAAGCAGCAGCTCTTACCTGGGCAAAAAACAGGATAC	1800		
DB	512397	CAGAGGATCTCGGACTTAATCCAAAGCAGCAGCTCTTACCTGGGCAAAAAACAGGATAC	512456		
QY	1801	AATCCGAATCTCTGAGGCTGCTGGAACCTTAGTTGCTTAAACGCTATGGGATCTTGT	1860		
DB	512457	AATCCGAATCTCTGAGGCTGCTGGAACCTTAGTTGCTTAAACGCTATGGGATCTTGT	512516		
QY	1861	GATGCGCTCCATACACAGCTTTGTAGCCACTTAAAGTACGCCAAATCTCAAGAACTCGC	1920		
DB	512517	GATGCGCTCCATACACAGCTTTGTAGCCACTTAAAGTACGCCAAATCTCAAGAACTCGC	512576		
QY	1921	GGAATCTGGTGAAGGATCTCGAACTCTTCCATAAAGATAGCAGGATGATGATGATGATG	1980		

Db 512577 GGCATCTGGTGTGAGGATCTCGAAGTCTTCCATTAAGATACGACGAAGATAATAA 512636
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; QY 2101 AAAAATAGAGCTTCTGCTTATGAGCTTCTCCATCTCCAGCATCTAGCGACTTGTCT 2160
; Db 512757 AAAAATAGAGCTTCTGCTTATGAGCTTCTCCATCTCCAGCATCTAGCGACTTGTCT 512816
; QY 2161 TCTCCAGCTTGTACGCTACCTTCTCTGATCTGAAAGTGGAGCGCTGCTCTTTGAT 2220
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; QY 2221 GCTCAGATCAGCTATATCTATAGTAAATAATCTATGAAACCTTATACCCCAAGCACCA 2280
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; QY 2641 AATCTCTCAAGCAAGCTGTATCGGAAGAGCAGGATCTTTATGCTTCTCTCCAAAT 2700
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US-09-198-452A-1/c
; Sequence 1, Application US/09198452A
; Patent No. 6559294
; GENERAL INFORMATION:
; APPLICANT: Griffiths, R.
; TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragments thereof and uses thereof, in particular for the diagnosis, prevention and treatment of infection
; TITLE OF INVENTION: and treatment of infection
; FILE REFERENCE: 9710-003-999
; CURRENT APPLICATION NUMBER: US/09/198,452A
; CURRENT FILING DATE: 1998-11-24
; NUMBER OF SEQ ID NOS: 6849
; SEQ ID NO 1

LENGTH: 1230025
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ORGANISM: Chlamydia pneumoniae
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OTHER INFORMATION: n-a or c or g or t
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OTHER INFORMATION: n-a or c or g or t

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(without alignments)
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Searched: 569978 seqs, 220691566 residues

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Total number of hits satisfying chosen parameters: 1139956

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Post-processing: Listing first 50 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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3	20	0.7	20	4	US-09-198-452A-2357
4	20	0.7	20	4	US-09-198-452A-2357
5	20	0.7	20	4	US-09-198-452A-4850
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9	20	0.7	20	4	US-09-198-452A-6496
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11	20	0.7	20	4	US-09-198-452A-6498
12	20	0.7	20	4	US-09-198-452A-6499
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20	18	0.6	21	6	5182262-4
21	18	0.6	47	4	US-09-422-978-29
22	18	0.6	193	3	US-09-221-298-58
23	18	0.6	328	4	US-09-357-787-10
24	18	0.6	874	1	US-08-469-667-3
25	18	0.6	874	4	US-09-224-110-3
26	18	0.6	874	5	PCT-US95-07289-3
27	18	0.6	1880	1	US-08-247-475-49

ALIGNMENTS

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US-09-198-452A-1
; Sequence 1, Application US/09198452A
; Patent No. 6559294
; GENERAL INFORMATION:
; APPLICANT: Grifais, R.
; TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragment thereof and uses thereof, in particular for the diagnosis, p
; TITLE OF INVENTION: and treatment of infection
; FILE REFERENCE: 9710-003-999
; CURRENT APPLICATION NUMBER: US/09/198,452A
; CURRENT FILING DATE: 1998-11-24
; NUMBER OF SEQ ID NOS: 6849
; SEQ ID NO 1
; LENGTH: 1230025
; TYPE: DNA
; ORGANISM: Chlamydia pneumoniae

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c 29	18	0.6	1880	1	US-08-191-866D-80	Sequence 80, Appl
c 30	18	0.6	1880	1	US-08-674-169-49	Sequence 49, Appl
c 31	18	0.6	1880	2	US-08-185-949B-80	Sequence 80, Appl
c 32	18	0.6	2373	3	US-08-789-275-1	Sequence 1, Appl
c 33	18	0.6	3218	2	US-08-677-862-1	Sequence 1, Appl
c 34	18	0.6	3218	3	US-09-252-571-1	Sequence 1, Appl
c 35	18	0.6	3218	3	US-09-434-065-1	Sequence 1, Appl
c 36	18	0.6	3805	4	US-09-220-132-9	Sequence 9, Appl
c 37	18	0.6	6567	4	US-09-328-352-3637	Sequence 3637, Ap
c 38	18	0.6	90541	4	US-09-759-359A-3	Sequence 3, Appl
c 39	17	0.6	179	1	US-08-248-474-8	Sequence 8, Appl
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c 43	17	0.6	321	4	US-09-782-857A-3	Sequence 3, Appl
c 44	17	0.6	415	3	US-08-793-035-5	Sequence 3, Appl
c 45	17	0.6	502	3	US-09-084-120-19	Sequence 19, Appl
c 46	17	0.6	551	3	US-08-750-141A-5	Sequence 5, Appl
c 47	17	0.6	804	4	US-09-252-991A-950	Sequence 950, App
c 48	17	0.6	1155	3	US-08-793-035-2	Sequence 2, Appl
c 49	17	0.6	1185	3	US-08-793-035-1	Sequence 1, Appl
c 50	17	0.6	1350	4	US-09-252-991A-1098	Sequence 1098, Ap

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Best Local Similarity	99.7%;	Pred. No. 0;		
Matches 2942;	Conservative	0;	Mismatches 4;	Indels 5;

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Mon Aug 25 09:44:03 2003

us-09-857-128-5.oli.rni

Page 4

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US-09-198-452A-2353

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; Sequence 2353, Application US/09198452A
; Patent No. 6559294
; GENERAL INFORMATION:
; APPLICANT: Griffais, R.
; TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, f
; TITLE OF INVENTION: thereof and uses thereof, in particular for the diagnosis
; TITLE OF INVENTION: and treatment of infection
; FILE REFERENCE: 9710-003-999
; CURRENT APPLICATION NUMBER: US/09/198,452A
; CURRENT FILING DATE: 1998-11-24
; NUMBER OF SEQ ID NOS: 6849
; SEQ ID NO 2353
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Chlamydia pneumoniae
US-09-198-452A-2353

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; Patent No. 6559294
; GENERAL INFORMATION:
; APPLICANT: Griffais, R.
; TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, f
; TITLE OF INVENTION: thereof and uses thereof, in particular for the diagnosis
; FILE REFERENCE: 9710-003-999
; CURRENT APPLICATION NUMBER: US/09/198,452A
; CURRENT FILING DATE: 1998-11-24
; NUMBER OF SEQ ID NOS: 6849
; SEQ ID NO 2357
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Chlamydia pneumoniae
US-09-198-452A-2357

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Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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; Patent No. 6559294
; GENERAL INFORMATION:
; APPLICANT: Griffais, R.
; TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, f
; TITLE OF INVENTION: thereof and uses thereof, in particular for the diagnosis
; TITLE OF INVENTION: and treatment of infection
; FILE REFERENCE: 9710-003-999
; CURRENT APPLICATION NUMBER: US/09/198,452A
; CURRENT FILING DATE: 1998-11-24
; NUMBER OF SEQ ID NOS: 6849
; SEQ ID NO 4850
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Chlamydia pneumoniae
US-09-198-452A-4850

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17989.140 Million cell updates/sec

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SUMMARIES

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48	20	0.7	597	14	CD056066
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ALIGNMENTS

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ACCESSION AQ341814
VERSION AQ341814.1 GI:4166710
KEYWORDS GSS.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
REFERENCE 1 (bases 1 to 459)
AUTHORS Zhao,S., Adams,M.D., Nierman,W., Malek,J., de Jong,P. and Venter,J.C.
TITLE Use of BAC End Sequences from Library RPCI-11 for Sequence-Ready Map Building
JOURNAL Unpublished
COMMENT Other_GSSs: RPC111-113B11.TJ
Contact: Shaying Zhao, William Nierman, Mark Adams
Department of Eukaryotic Genomics
The Institute for Genomic Research

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Fax: 301 838 0208

Email: hbe@tigr.org
Clones are derived from the human BAC library RPCI-11. For BAC library availability, please contact Pieter de Jong (pieter@dejong.med.buffalo.edu). Clones may be purchased from BACPAC Resources (<http://bacpac.med.buffalo.edu/ordering>) or from Research Genetics (<http://inforesgen.com>). BAC end search page: http://www.tigr.org/tldb/humgen/bac_end_search/bac_end_search.html
Seq primer: 17
Class: BAC ends.

FEATURES
Source Location/Qualifiers

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/mol_type="genomic DNA"
/db_xref="GDB:7543042"
/db_xref="taxon:9606"
/clone="RPCI-11-113B11"
/sex="Male"
/cell_type="Lymphocytes"
/clone_lib="RPCI-11"
/note="Vector: pBACe3.6; Site_1: EcoRI; Site_2: EcoRI; RPC11 Human Male BAC Library"

BASE COUNT 148 a 64 c 99 g 147 t 1 others

Query Match 0.7%; Score 22; DB 28; Length 459;
Best Local Similarity 100.0%; Pred. No. 12;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 351 CTACTGGGAATCTTCTTCCA 372
|||||
DB 277 CTACTGGGAATCTTCTTCCA 256

RESULT 2

BH556109

LOCUS

DEFINITION BH556109. 806 bp DNA linear GSS 14-DEC-2001 BOHP63TR BOHQ Brassica oleracea genomic clone BOHP63, genomic survey sequence.

ACCESSION BH556109

VERSION BH556109.1 GI:17807889

KEYWORDS GSS.

SOURCE Brassica oleracea

ORGANISM

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids

1 (bases 1 to 806)

Other GSSs: BOHP63TF

Contact: Chris Town

TIGR

9712 Medical Center Drive, Rockville, MD 20850, USA.

Tel: 301-838-3523

Fax: 301-838-0208

Email: cdtown@tigr.org

DNA is from a doubled haploid provided by Tom Osborn.

Seq primer: TR

Class: sheared ends.

Location/Qualifiers

1..806

/organism="Brassica oleracea"

/mol_type="genomic DNA"

/strain="Tol000D43"

/db_xref="taxon:3712"

/clone="BOHP63"

/note="Vector: pBACe3.6; Site_1: BstXI; Site_2: 3 kb sheared genomic DNA inserted into pBACe3 using BstXI linkers"

BASE COUNT 336 a 92 c 148 g 308 t

Query Match 0.7%; Score 22; DB 28; Length 884;

Best Local Similarity 100.0%; Pred. No. 16;

Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 794 AGTTTATTACGACACAAAG 815

|||||

DB 6 AGTTTATTACGACACAAAG 27

RESULT 4

BASE COUNT 202 a 198 c 145 g 261 t

Query Match

Best Local Similarity 0.7%; Score 22; DB 28; Length 806;

Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 104 AAATCCTCTCTCATGCTTTT 125

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DB 697 AAATCCTCTCTCATGCTTTT 718

RESULT 3

BH167045

LOCUS

DEFINITION BH167045 884 bp DNA linear GSS 24-SEP-2001 ENTSG161TF Entamoeba histolytica Sheared DNA Entamoeba histolytica genomic, genomic survey sequence.

ACCESSION BH167045

VERSION BH167045.1 GI:15740483

KEYWORDS GSS.

SOURCE Entamoeba histolytica

ORGANISM

Eukaryota; Entamoebidae; Entamoeba.

REFERENCE 1 (bases 1 to 884)

AUTHORS Loftus,B., Wang,Z., Van Aken,S. and Fraser,C.

TITLE Determination of clone end sequences from Entamoeba histolytica

JOURNAL HMI:IMSS sheared DNA library (2001)

COMMENT Unpublished

Contact: Brendan J Loftus

Department of Eukaryotic Genomics

The Institute for Genomic Research

9712 Medical Center Dr., Rockville, MD 20850, USA

Tel: 301 838 0208

Fax: 301 838 3543

Email: bjl@tigr.org

Clones are derived from the Entamoeba histolytica HMI-IMSS sheared DNA library

Seq primer: M13-Forward

Class: shotgun

High quality sequence stop: 717.

Location/Qualifiers

1..884

/organism="Entamoeba histolytica"

/mol_type="genomic DNA"

/strain="HMI:IMSS"

/db_xref="taxon:5759"

/clone_lib="Entamoeba histolytica Sheared DNA"

/note="Vector: pBACe3.6; Site_1: Bst I; Constructed at The

Institute for Genomic Research (TIGR), Rockville, MD.

Genomic DNA isolated from broth cultures of E. histolytica

using a method described by Clark and Diamond (Clark,

C.G., and Diamond, L.S. (1993) Entamoeba histolytica: a

method for isolate identification. Exp. Parasitol.

77:450.). The DNA was mechanically sheared to give a

tight size distribution (~2 kb). The v + i method used for

the library construction is described in detail in Smith,

H.O. and Venter, J.C. (Making small insert libraries for

whole genome shotgun sequencing projects. In Genome

Sequencing: A Practical Approach, eds. M. Vaudin and B.

Barell, Oxford University Press, 1999).

BASE COUNT 336 a 92 c 148 g 308 t

Query Match 0.7%; Score 22; DB 28; Length 884;

Best Local Similarity 100.0%; Pred. No. 16;

Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 794 AGTTTATTACGACACAAAG 815

|||||

DB 6 AGTTTATTACGACACAAAG 27

Aug 25 09:44

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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - nucleic search, using frame_plus_p2n model

Run on: August 24, 2003, 01:44:58 ; Search time 5731 Seconds
(without alignments)
6624.347 Million cell updates/sec

Title: US-09-857-128-14

Perfect score: 4759

Sequence: 1 MKSLHWFLLSSSLALPLSL.....MEIRSSRSYNADLGKGFQ 928

Scoring table:

BLOSUM62
Xgapop 10.0 , Xgapext 0.5
Ygapop 10.0 , Ygapext 0.5
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 2888711 seqs, 20454813386 residues

Total number of hits satisfying chosen parameters: 5777422

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 50 summaries

Command line parameters:

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-DB=GenEmbl -QWRT=fastcap -SUFFIX=p2n.rge -MINMATCH=0.1 -LOOPCL=0 -LOOPEXT=0
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-DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALIGN=50 -MODE=LOCAL
-OUTFMT=ptc -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000
-USER=US09857128.ecgn.1.1.3733 @runat_22082003_105524_9221 -NCPU=6 -ICPU=3
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-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database :

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2: gb.htg.*
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4: gb.om.*
5: gb.ov.*
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22: em.ov.*
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41: em.htgo.other.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	4739	99.6	2787	6	AX349511 Sequence
2	4739	99.6	10757	1	AE001628 Chlamydia
3	4739	99.6	12676	1	AE002192 Chlamydia
4	4739	99.6	17280	1	CPN133034 Chlamydia
5	4739	99.6	300650	1	AP002546 Chlamydia
6	4726	99.3	2787	6	A81839
7	4666.5	98.1	110000	6	AR310754_05
8	1971	41.4	2787	6	A81835
9	1954	41.1	12127	1	AE002235
10	1954	41.1	16448	1	AE001587 Chlamydia
11	1954	41.1	26920	1	CPN133035 Chlamydia
12	1954	41.1	299650	1	AP002545 Chlamydia
13	1951	41.0	10026	1	AE002193 Chlamydia
14	1950	41.0	2781	6	AX662119 Sequence
15	1950	41.0	2781	6	AX666191 Sequence
16	1950	41.0	4926	1	CPU72499 Chlamydia
17	1949	41.0	2793	6	AX349523 Chlamydia
18	1949	41.0	15068	1	AE001627 Chlamydia
19	1942	40.8	110000	6	AR310754_00
20	1941	40.8	2757	6	A81837
21	1941	40.8	300512	1	AE016995
22	1940	40.8	2793	6	A81841
23	1920	40.3	2815	6	A81829
24	1920	40.3	12676	1	AE002192
25	1920	40.3	17280	1	CPN133034
26	1920	40.3	300650	1	AP002546
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29	1864.5	39.2	110000	6	AR310754_05
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31	1856	39.0	6030	1	CPOMP54
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37	1718	36.1	2241	6	AX349497
38	1672	35.1	2838	6	A81849
39	1625.5	34.2	2520	6	AX662085
40	1625.5	34.2	2520	6	AX666157
41	1625.5	34.2	6110	1	CPU65942
42	1625.5	34.2	6234	1	CPU65943
43	1615.5	33.9	300955	1	AE016996
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ALIGNMENTS

RESULT 1
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 LOCUS
 DEFINITION Sequence 34 from Patent WO20202606.
 ACCESSION AX349511
 VERSION AX349511.1 GI:18615362
 KEYWORDS
 SOURCE
 ORGANISM
 Chlamydomophila pneumoniae
 Chlamydomophila pneumoniae
 Bacteria; Chlamydiae; Chlamydiales; Chlamydiaceae; Chlamydomophila.
 REFERENCE
 1 Ratti, G. and Grandi, G.
 AUTHORS
 TITLE Immunisation against Chlamydia pneumoniae
 JOURNAL Patent: WO 0202606-A 34 10-JAN-2002;
 Chiron S.p.A. (IT)
 FEATURES
 Location/Qualifiers
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 BASE COUNT 814 a 689 c 535 g 749 t
 ORIGIN

Alignment Scores:
 Pred. No.: 2,66e-272 Length: 2787
 Score: 4739.00 Matches: 925
 Percent Similarity: 99.68% Conservative: 0
 Best Local Similarity: 99.68% Mismatches: 3
 Query Match: 99.58% Indels: 0
 DB: 6 Gaps: 0

US-09-857-128-14 (1-928) x AX349511 (1-2787)

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 601 GGAGGGATTACAATTACAACTACCTTAACTCAGCATCATTTCTGAAATACCGCGCG 660
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LOCUS           Chlamydia pneumoniae section 44 of 103 of the complete genome.
DEFINITION
ACCESSION      AE001628 AE001363
VERSION        AE001628.1 GI:4376730
KEYWORDS
SOURCE
ORGANISM       Chlamydia pneumoniae CWL029
REFERENCE      Chlamydia pneumoniae CWL029
AUTHORS        Bacteria; Chlamydiae; Chlamydiales; Chlamydiaceae; Chlamydia.
                1 (bases 1 to 10757)
                Kalman, S., Mitchell, W., Marathe, R., Lammel, C., Fan, J., Hyman, R. W.,
                Olinger, L., Grimwood, J., Davis, R. W. and Stephens, R. S.
                Comparative genomes of Chlamydia pneumoniae and C. trachomatis
                Nat. Genet. 21 (4), 385-389 (1999)
                99206606
                PUBMED 10192388
REFERENCE      2 (bases 1 to 10757)
AUTHORS        Kalman, S., Mitchell, W., Marathe, R., Lammel, C., Fan, J., Olinger, L.,
                Grimwood, J., Davis, R. W. and Stephens, R. S.
                Direct Submission
                Submitted (01-DEC-1998) Program in Infectious Diseases, University
                of California, 235 Earl Warren Hall, Berkeley, CA 94720, USA
FEATURES
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 AUTHORS Read,T.D., Brunham,R.C., Shen,C., Gill,S.R., Heidelberg,J.F., White,O., Hickey,E.K., Peterson,J., Umayam,L.A., Utterback,T., Berry,K., Bass,S., Linher,K., Weidman,J., Khouri,H., Craven,B., Bowman,C., Dodson,R., Gwinn,M., Nelson,W., DeBoy,R., Kolonay,J., McClarty,G., Salzberg,S.L., Eisen,J. and Fraser,C.M.
 TITLE Genome sequences of Chlamydia trachomatis Mofn and Chlamydia pneumoniae AR39
 JOURNAL Nucleic Acids Res. 28 (6), 1397-1406 (2000)
 MEDLINE 20150255
 PUBMED 10684935
 REFERENCE 2 (bases 1 to 12676)
 AUTHORS Read,T.D., Brunham,R.C., Shen,C., Gill,S.R., Heidelberg,J.F., White,O., Hickey,E.K., Peterson,J., Umayam,L.A., Utterback,T., Berry,K., Bass,S., Linher,K., Weidman,J., Khouri,H., Craven,B., Bowman,C., Dodson,R., Gwinn,M., Nelson,W., DeBoy,R., Kolonay,J., McClarty,G., Salzberg,S.L., Eisen,J. and Fraser,C.M.
 TITLE Direct Submission
 JOURNAL Submitted (01-MAR-2000) The Institute for Genomic Research, 9712 Medical Center Dr, Rockville, MD 20850, USA
 COMMENT On Jun 1, 2000 this sequence version replaced gi:7189226.
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ORIGIN

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Pred. No.:

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Percent Similarity:

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Query Match:

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Conservative: 0

Mismatches: 3

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DEFINITION (partial), omp11, omp10, omp5, omp4, omp13 and omp14 (partial) and
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ACCESSION AJ133034
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gene; omp5 gene; ORF1; outer membrane protein; outer membrane
protein 11; outer membrane protein 12; outer membrane protein 14;
outer membrane protein 4; outer membrane protein 5.
SOURCE    Chlamydia pneumoniae
ORGANISM  Chlamydia pneumoniae
REFERENCE 1
AUTHORS   Daugaard,L., Hjerno,K., Knudsen,K., Madsen,A.S., Christiansen,G.
and Birkelund,S.
JOURNAL   Unpublished
REFERENCE 2 (bases 1 to 17280)
AUTHORS   Boesen,T.
TITLE     Direct Submission
JOURNAL   Submitted (21-JAN-1999) Boesen T., Department of Medical
Microbiology and Immunology, University of Aarhus, The Bartholin
Building, DK-8000 Aarhus, DENMARK
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US-09-857-128-14 (1-928) x CPN133034 (1-17280)

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 DEFINITION section 2/4.

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VERSION
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 Bacteria; Chlamydiae; Chlamydiales; Chlamydiaceae; Chlamydomophila.

REFERENCE
 1 Shirai, M., Hirakawa, H., Ouchi, K., Tabuchi, M., Kishi, F., Kimoto, M.,
 Takeuchi, A., Nishida, J., Shibata, K., Fujinaga, R., Yoneda, H.,
 Matsushina, H., Tanaka, C., Furukawa, S., Miura, K., Nakazawa, A.,
 Ishii, K., Shiba, T., Hattori, M., Kuhara, S. and Nakazawa, T.
 Comparison of outer membrane protein genes omp and pmp in the whole
 genome sequences of Chlamydia pneumoniae isolates from Japan and
 the United States
 J. Infect. Dis. 181 Suppl 3, S524-S527 (2000)
 20298986
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TITLE
 JOURNAL
 MEDLINE
 PUBMED
 REFERENCE
 AUTHORS
 Shirai, M., Hirakawa, H., Kimoto, M., Tabuchi, M., Kishi, F., Ouchi, K.,
 Shiba, T., Ishii, K., Hattori, M., Kuhara, S. and Nakazawa, T.
 Comparison of whole genome sequences of Chlamydia pneumoniae J138
 from Japan and WOL029 from USA
 Nucleic Acids Res. 28 (12), 2311-2314 (2000)

JOURNAL
 MEDLINE
 PUBMED
 REFERENCE
 AUTHORS
 Shirai, M.
 Direct Submission
 Submitted (04-JUL-2000) Mutsunori Shirai, Yamaguchi University
 School of Medicine, Department of Microbiology; 1-1-1
 Minamikoogushi, Ube, Yamaguchi 755-8505, Japan
 (E-mail: mshirai@po.cc.yamaguchi-u.ac.jp, tel: 81-836-22-2227,
 Fax: 81-836-22-2415)
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 SOURCE unidentified
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 AUTHORS Maden,A. and Birkelund,S.
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Sequence split into 13 fragments LOCUS AR310754 Accession AR310754

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Continuation (6 of 13) of AR310754 from base 500001 (AR310754 Sequence 1 from patent US

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Db	12337	GATCCCTAGAAAAATCTCATTCATTGGGGATACCAAGGGAATGGGCATTATCTTGG	12396	
QY	581	GlnGluAspThrAlaThrLysSerLysAlaAlaThrLeuThrTrpThrLysThrGlyTyr	600	
Db	12397	CAAGAGGATCTGCGCACTAAATCCAAAGCAGCGACTTTTACCTGGCAAAAACAGGATAC	12456	
QY	601	AsnProAsnProGluArgGlyThrLeuValAlaAsnThrLeuTrpGlySerPheVal	620	
Db	12457	ATCCGAATCTTGAGCGCTGCGAACCTTAGTGTACACACTATGGGATCTCTTGT	12516	
QY	621	AspValArgSerIleGlnGlnLeuValAlaThrLysValArgGlnSerGlnGluThrArg	640	
Db	12517	GATGTGCGCTCCATCAACAGCTTGTAGCCACTAAAGTACGCCAATCTCAAGAAACTCGC	12576	
QY	641	GlyIleTrpCysGluGlyIleSerAsnPheHisLysAspSerThrLysIleAsnLys	660	
Db	12577	GGCATCTGGTGAAGGATCTCGAATCTTCCATTAAGATAGCAGCAATAATAA	12636	
QY	661	GlyPheArgHisIleSerAlaGlyTyrValValGlyAlaThrThrLeuAlaSerAsp	680	
Db	12637	GGTTTCCGCATATGATGTCAGGTTATGTTAGAGGCGACTTACAACTATGCTCTCAT	12696	
QY	681	AsnLeuIleThrAlaAlaPheCysGlnLeuPheGlyLysAspArgAspHisPheIleAsn	700	
Db	12697	AATCTTATCACTGCGCTTCTGCCAATTTTCGGGAAGATAGATCACTTTATAAT	12756	
QY	701	LysAsnArgAlaSerAlaTyrAlaAlaSerLeuHisLeuGlnHisLeuAlaThrLeuSer	720	
Db	12757	AAAAATAGAGCTTCTGCCTATGCAGCTTCTCCATCTCCAGCATCTAGCACCTTGTCT	12816	
QY	721	SerProSerLeuLeuArgTyrLeuProGlySerGluSerGluInProValLeuPheAsp	740	
Db	12817	TCTCCAAAGCTTGTACGTACCTTCTGATCTGAAGTGAAGCAGCTTCTCTTTGAT	12876	
QY	741	AlaGlnIleSerTyrIleTyrSerLysAsnThrMetLysThrTyrThrGlnAlaPro	760	
Db	12877	GCTCAGATCAGCTATATCTATAGTAAAAATACTATGAAAAACCTATTACACCAAGCACCA	12936	
QY	761	LysGlyGluSerSerTrpTyrAsnAspGlyCysAlaLeuGluLeuAlaSerSerLeuPro	780	
Db	12937	AAGGAGAGAGCTCGTGTATATACAGCTTCCGCTCTGGAATCTCGAGCTCCCTACCA	12996	
QY	781	HisThrAlaLeuSerHisGluGlyLeuPheHisAlaTyrPheProPheIleLysValGlu	800	
Db	12997	CACACTGTTTAAGCCATGAGGCTCTTCCACGGGTATTTTCCTTCATCAAGATGAA	13056	
QY	801	AlaSerTyrIleHisGlnAspSerPheLysGluArgAsnThrThrLeuValArgSerPhe	820	
Db	13057	GCTTCGTATACACCAAGATAGCTTCAAGAACGTAATACTACCTTGTGATGATCTTTC	13116	
QY	821	AspSerGlyAspLeuLeuAsnValSerValProIleGlyIleThrPheGluArgPheSer	840	
Db	13117	GATACGGTGTATTAATTAACGCTCTGTGCTATTTGGAATTAACCTTCGAGAGATCTCG	13176	
QY	841	ArgAsnGluArgAlaSerTyrGluAlaThrValIleTyrValAlaAspValTyrArgLys	860	
Db	13177	AGAAACGAGCGTGTCTTACGAGCTACTGTCATCTAGTTGCCGATGCTCTATCGTAAG	13236	
QY	861	AsnProAspCysThrThrAlaLeuLeuLeuAsnAsnThrSerTrpLysThrThrGlyThr	880	
Db	13237	AATCTGACTGCAGCAGCTCTCTCTAATCAACAATACCTCTGGAAAACTACAGGAAGC	13296	
QY	881	AsnLeuSerArgGlnAlaGlyIleGlyArgAlaGlyIlePheTyrAlaPheSerProAsn	900	
Db	13297	AATCTCTCAAGCAAGCTGGTATCGAAGAGCAGGAGATCTTTATGCCCTCTCTCCAAAT	13356	
QY	901	LeuGluValThrSerAsnLeuSerMetGluIleArgGlySerSerArgSerTyrAsnAla	920	
Db	13357	CTTGAGGTCACAAGTAACCTATCTATGGAATTCGTGGATCTTCACGCGCTACAAATGCA	13416	
QY	921	AspLeuGlyLysPheGlnPhe	928	
Db	13417	GATCTGGAGTAAGTTCAGTTCCAGTTC	13440	
RESULT 8				
LOCUS A81835				
DEFINITION Sequence 9 from Patent WO9858953.				
ACCESSION A81835				
VERSION A81835.1				
KEYWORDS GI:6731868				
SOURCE unidentified				
ORGANISM unclassified				
REFERENCE 1 (bases 1 to 2787)				
AUTHORS Madsen, A. and Birkelund, S.				
TITLE NOVEL SURFACE EXPOSED PROTEINS FROM CHLAMYDIA PNEUMONIAE				
JOURNAL Patent: WO 9858953-A 9 30-DEC-1998;				
MADSEN ANNA SOFIE (DK); BIRKELUND SVEND (DK)				
FEATURES				
source				
1..2787				
/organism="unidentified"				
/mol_type="genomic DNA"				
/db_xref="taxon:32644"				
BASE COUNT 811 a 583 c 598 g 795 t				
ORIGIN				
Alignment Scores:				
Pred. No.: 6.35e-108 Length: 2787				
Score: 1971.00 Matches: 427				
Percent Similarity: 60.63% Conservative: 149				

1801	DB	AAATCCGAATCCTGAGCGTCTGGAAACCTTAGTTGCTAAACGCTATGGGATCCTTTGTT	1860
621	QY	ASpValArgSerIleGlnGlnLeuValAlaThrLysValArgGlnSerGlnGluThrArg	640
1861	DB	GATGTGCGCTCCATACACAGCTTGTAGCCACTAAAGTACGCCAATCTCAAGAACTCGC	1920
641	QY	GlyIleTrpCysGluGlyLeuSerAsnPheHisLysAspSerThrLysIleAsnLys	660
1921	DB	GGCATCTCGTGTGAAGGATCTCGAATCTTCCATAAAGATAGCACGAAGATAATAAA	1980
661	QY	GlyPheArgHisIleSerAlaGlyTyrValValGlyAlaThrThrLeuAlaSerAsp	680
1981	DB	GGTWTTCGCCACATAAGTCGAGGTATGTGTAGGAGCGACTACAACATTACTCTGAT	2040
681	QY	AsnLeuIleThrAlaAlaPheCysGlnLeuPheGlyLysAspArgAspHisPheIleAsn	700
2041	DB	AATCTTATCACTCGAGCCTTCTGCCAATATTCGGGAAGATAGAGATCACTTTATAAT	2100
701	QY	LysAsnArgAlaSerAlaTyrAlaAlaSerLeuHisLeuGlnHisLeuAlaThrLeuSer	720
2101	DB	AAAAATAGAGCTTCTGCGCTATGCAGCTTCTCTCCATCTCCAGACTATAGCGACCTTGCT	2160
721	QY	SerProSerLeuLeuArgTyrLeuProGlySerGluSerGluGlnProValLeuPheAsp	740
2161	DB	TCCTCAAGCTGTGTACCTACCTTCCTCGTGATCTGAAAGTGAAGCGCTGTCTCTTGAT	2220
741	QY	AlaGlnIleSerTyrIleTyrSerLysAsnThrMetLysThrTyrTyrThrGlnAlaPro	760
2221	DB	GCTCAGATCAGCTATATCTATAGTAAATACTATGAAACCTATTACACCAAGCACCA	2280
761	QY	LysGlyCysSerSerTrpTyrAsnAspGlyCysAlaLeuGluLeuAlaSerSerLeuPro	780
2281	DB	AAGGAGAGAGCTCGTGGTATAATGAGGTGGCTCTGGAACCTTCGAGCTCCCTACCA	2340
781	QY	HisThrAlaLeuSerHisGluGlyLeuPheHisAlaTyrPheProPheIleLysValGlu	800
2341	DB	CACACTGCTTTAAGCCATGAGGCTCTCTCCACGCGTATTTTCTCTTCATCAAGTAGAA	2400
801	QY	AlaSerTyrIleHisGlnAspSerPheLysGluArgAsnThrThrLeuValArgSerPhe	820
2401	DB	GCTTCGTATACATACCAAGATAGCTTCAAGAAGCGTAATACTACCTTGGTACGATCTTC	2460
821	QY	AspSerGlyAspLeuIleAsnValSerValProIleGlyIleThrPheGluArgPheSer	840
2461	DB	GATACCGGTGATTTAATTAACTGCTCTGTCCTATTTGGAATTAACCTTCGAGAGATCTCG	2520
841	QY	ArgAsnGluArgAlaSerTyrGluAlaThrValIleTyrValAlaAspValTyrArgLys	860
2521	DB	AGAAACGAGCGTGCCTTACGAAGCTACTGTCTACGAAGCTACTGTCTACGTTCGCGATGCTATCGTAAG	2580
861	QY	AsnProAspCysThrThrAlaLeuLeuIleAsnAsnThrSerTrpLysThrThrGlyThr	880
2581	DB	ANTCCTGACTACGACAGCTCTCTTAATCAACATACCTCGTGGAAACTACAGGACG	2640
881	QY	AsnLeuSerArgGlnAlaGlyIleGlyArgAlaGlyIlePheTyrAlaPheSerProAsn	900
2641	DB	AATCTCTCAAGACAGCTGGTATCGGAAGACAGCGATCTTTATGCGCTTCTCTCCAAT	2700
901	QY	LeuGluValThrSerAsnLeuSerMetClnIleArgGlySerSerArgSerTyrAsnAla	920
2701	DB	CTTGAGGTCAACAAGTAACCTATCTATCGAATTCGTGATCTTCACGACGATCAATGCA	2760
921	QY	AspLeuGlyGlyLysPheGlnPhe	928
2761	DB	GATCTTGGAGGTAAAGTTCACGATTC	2784

RESULT 4
AAC81914/c
ID AAC81914 standard; DNA; 273254 BP.
XX
XX AAC81914;
XX
DT 27-FEB-2001 (first entry)

XX	Chlamydia pneumoniae genome DNA.
DE	Genome; diagnosis; vaccine; ds.
XX	Chlamydia pneumoniae.
KW	WO200027994-A2.
XX	18-MAY-2000.
OS	12-NOV-1999; 99WO-US26923.
XX	12-NOV-1998; 98US-0108279.
PN	08-APR-1999; 99US-0128606.
XX	(RECC) UNIV CALIFORNIA.
XX	Stephens R, Mitchell W, Kalman
PI	WPI; 2000-376516/32.
XX	Isolated nucleic acid for use in
PT	encodes nucleic sequence of Chlamydia
XX	Claim 2; Page 128-320; 320pp; Eng
PS	This invention describes a novel
XX	pneumoniae protein (PI), given in
CC	acid is useful for diagnostic and
CC	hybridization-based assays or am
CC	be used for diagnostic purposes,
CC	activity, or as a vaccine. The in
CC	comprising a hybridizing fragme
CC	(N2) that hybridizes under string
CC	cassette comprising N1 under the
CC	transcriptional initiation region
CC	transcriptional termination regio
CC	cassette of (3) as part of an ext
CC	the genome of a host cell as a re
CC	cassette into the host cell, and
CC	(5) a method for producing a PI
CC	the protein is expressed and iso
CC	proteins; (6) a purified polypept
CC	weight % of PI; and (7) a monoclo
CC	peptide of (6).
XX	
SQ	Sequence 273254 BP; 76423 A; 5105
Alignment Scores:	
Pred. No.:	0
Score:	4739.00
Percent Similarity:	99.68%
Best Local Similarity:	99.68%
Query Match:	99.58%
DB:	21
US-09-857-128-14 (1-928) x AAC81914 (1-	
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Db	105738 ATGAATCCCTCTCTCATTCGTTT
QY	21 AspPheSerAlaPheAlaAlaValV
Db	105678 MATTTCTCGCTTCTGCTGCTGTG
QY	41 GlyProGlyThrTyThrProProA
Db	105618 GGACAGGAACCTACACTCCTCCAG
QY	61 LeuThrGlyAspValSerIleThrA

105558 CTAACAGGGGATGCTCAATCACCATCGAGATCTCCGACAGCTCTAACCGCTTCCTGC 105499
Qy 81 PheLysGluThrThrGlyAsnLeuSerPheGlnGlyHisGlyTyrGlnPheLeuLeuGln 100
Db TTTAAGAAACTACTGGGAATCTTCTTTCACAGCCACGCTACCAATTTCTCTACAA 105439
Qy 101 AsnIleAspAlaGlyAlaAsnCysThrPheThrAsnThrAlaAlaAsnLysLeuLeuSer 120
Db AATATCAGATCGGGAGCACTGTACCTTTACCAATACAGCTGCAAAATAAGCTCTCTCC 105379
Qy 121 PheSerGlyPheSerTyrLeuSerLeuIleGlnThrThrAsnAlaThrGlyThrGly 140
Db TTTTCAGGATTCCTATTGTCTACTAATACAAACAGCAATGTACACAGGAACAGGA 105319
Qy 141 AlaIleLysSerThrGlyAlaCysSerIleGlnSerAsnTyrSerCysTyrPheGlyGln 160
Db GCCATCAAGTCCACAGAGCTGTCTATTTCAGTCGAATATAGTTGCTACTTTGGCAA 105259
Qy 161 AsnPheSerAsnAspAsnGlyAlaLeuGlnGlySerSerIleSerLeuSerLeuAsn 180
Db AACTTTTCTAATGACATGAGCGGCCCTCCAGGAGCTCTATCATGCTCTATCGCTAAC 105199
Qy 181 ProAsnLeuThrPheAlaLysAsnLysAlaThrGlnLysGlyGlyAlaLeuTyrSerThr 200
Db CCCAACCCTAACGTTTGCACAAACAAAGCAACGCAAAAGGGGGTGCCTCTATTCCAG 105139
Qy 201 GlyGlyIleThrIleAsnAsnThrLeuAsnSerAlaSerPheSerGluAsnThrAlaAla 220
Db GAGGAGGATTAACATTAACATAGTTAAACTCAGCATCATTTTCTGAAATACCGCGCG 105079
Qy 221 AsnAsnGlyGlyAlaIleTyrThrGluAlaSerSerPheIleSerSerAsnLysAlaIle 240
Db AACAAATGGCGGAGCCATTTACCGGAGCTAGCAGTTTATTAGCAGCAACAAAGCAAT 105019
Qy 241 SerPheIleAsnAsnSerValThrAlaThrSerAlaThrGlyGlyAlaIleTyrCysSer 260
Db AGCTTTATAAACAATAGTGTGACCGCAACTCTGCTATAGATAGTCTTACTGTAGT 104959
Qy 261 SerThrSerAlaProLysProValLeuThrLeuSerAspAsnGlyGluLeuAsnPheIle 280
Db AGTACATCAGCCCCCAACCACTCTTAACCTCTATCAGCAACGCGGAACTGAATTTATA 104899
Qy 281 GlyAsnThrAlaIleThrSerGlyAlaIleTyrThrAspAsnLeuValLeuSerSer 300
Db CGAAATACAGCAATTAAGTGGTGGCGATTTATATGCAATCTAGTTCTTTCTTCTCT 104839
Qy 301 GlyGlyProThrLeuPheLysAsnAsnSerGlyTyrAspThrAlaAlaProLeuGlyGly 320
Db GGAGGACCTACGCTTTTAAACAACTCTGCTATAGATAGTACGCTCCCTTAGGAGA 104779
Qy 321 AlaIleAlaIleAlaAspSerGlySerLeuSerLeuSerAlaLeuGlyGlyAspIleThr 340
Db GCAATTCGATTCGACTCTGGATCTTTGAGTCTTTCCGGCTCTTGGGAGACATCACT 104719
Qy 341 PheGluGlyAsnThrValLysGlyAlaSerSerGlnThrThrAlaSerGlnGlyAsnThr 360
Db TTTCAAGGAAACACAGTAGTCAAGGAGCTTCTTCGAGTCAGACCATACCAAGAAATCT 104659
Qy 361 IleAsnIleGlyAsnThrAsnAlaLysIleValGlnLeuArgAlaSerGlnGlyAsnThr 380
Db ATTAACATCGGAACACCAATGCTTAAGATTGATAGTCTGAGCTGCGAGCTCTCAAGGCAAT 104599
Qy 381 IleTyrPheTyrAspProIleThrThrSerIleThrAlaAlaLeuSerAspAlaLeuAsn 400
Db ATCTACTTCTATGATCTCTAATACCAATAGCATCACTACGCTCTCTCAGATGCTCTAAC 104539
Qy 401 LeuAsnGlyProAspLeuAlaGlyAsnProAlaTyrGlnGlyThrIleValPheSerGly 420
Db TTAATGGTCTGACCTTGCAGGAATCTTGCATATCAAGAACCATTCGATTCTTTCTGGA 104479
Qy 421 GluLysLeuSerGluAlaGluAlaAlaGluAlaAspAsnLeuLysSerThrIleGlnGln 440
Db TGAATGAGAGCTCTCGAAGCAGAGCTGCAAGAGCTGATAATCTCAAAATCAATTCAGCA 104419

Qy 441 ProLeuThrLeuAlaGlyGlyGlnLeuSerLeuLysSerGlyValThrLeuValAlaLys 460
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Qy 461 SerPheSerGlnSerProGlySerThrLeuLeuMetAspAlaGlyThrThrLeuGluThr 480
Db TCCCTTTTCGAAATCTCGGGCTCTACCTCTCTCATGATGAGGACACCATTAGAAACC 104299
Qy 481 AlaAspGlyIleThrIleAsnAsnLeuValLeuAsnValAspSerLeuLysGluThrLys 500
Db GCTGATGGATCACTATCATATAATCTTGTCTCAATAGATCTCTTAAAGAGACCAAG 104239
Qy 501 LysGlyThrLeuLysAlaThrGlnAlaSerGlnThrValThrLeuSerGlySerLeuSer 520
Db AAGGCTACGCTAAAGCAACACAAAGCAAGTACAGACGCTACTTATCTGGATCGCTCTCT 104179
Qy 521 LeuValAspProSerGlyAsnValTyrGluAspValSerTrpAsnAsnProGlnValPhe 540
Db CTGTAGATCTTCTGGAATGTCTAGAAAGATGTCTCTTGGAAATTAACCTCAAGTCTTT 104119
Qy 541 SerCysLeuThrLeuThrAlaAspAspProAlaAsnIleHisIleThrAspLeuAlaAla 560
Db TCTTGTCTCACTCTTACTGCTGAGACCCCGCGAATATTACATCACAGACTTAGCTGCT 104059
Qy 561 AspProLeuLysAsnProIleHisTrpGlyTyrGlnGlyAsnTrpAlaLeuSerTrp 580
Db GATCCCTTGAATAAATCTCTATCCATTGGGATACCAAGGAATTTGGCATTTATCTTGG 103999
Qy 581 GlnGluAspThrAlaThrLysSerLysAlaAlaThrLeuThrTrpThrLysThrGlyTyr 600
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Qy 601 AsnProAsnProGluArgArgGlyThrLeuValAlaAsnThrLeuTrpGlySerPheVal 620
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Qy 621 AspValArgSerIleGlnLeuValAlaThrLysValArgGlnSerGlnGluThrArg 640
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Qy 641 GlyIleTrpCysGluGlyIleSerAsnPheHisLysAspSerThrLysIleAsnLys 660
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Qy 661 GlyPheArgHisIleSerAlaGlyTyrValValGlyAlaThrThrLeuAlaSerAsp 680
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Qy 681 AsnLeuIleThrAlaAlaPheCysGlnLeuPheGlyLysAspArgAspHisPheIleAsn 700
Db AATCTTATCACTGCGAGCTTCTGCCAATATTTCGGGAAGATAGAGATCACTTTATAAT 103639
Qy 701 LysAsnArgAlaSerAlaTyrAlaAlaSerLeuHisLeuGlnHisLeuAlaThrLeuSer 720
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Qy 721 SerProSerLeuLeuArgTyrLeuProGlySerGluSerGluGlnProValLeuPheAsp 740
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Qy 741 AlaGlnIleSerTyrIleTyrSerLysAsnThrMetLysThrTyrThrGlnAlaPro 760
Db GCTCAGATCAGCTATATCTATAGTAAATACTATGAAACCTATTACACCAAGACCA 103459
Qy 761 LysGlyLeuSerSerTrpTyrAsnAspGlyCysAlaLeuGluLeuAlaSerSerLeuPro 780
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Qy 781 HisThrAlaLeuSerHisGluGlyLeuPheHisAlaTyrPheProPheIleLysValGlu 800
Db CACACTGCTTAAAGCATGAGGCTCTCTCCACGCGTATTTTCTTCTTCACTCAAGTAGAA 103339

QY 801 AlaSerTyrIleHisGlnAspSerPheLysGluArgAsnThrThrLeuValArgSerPhe 820
 DB 103338 GCTTCGTACATACACCAAGATAGTTCACAAAGACGATATACATCTGGTACGATCTTC 103279
 QY 821 AspSerGlyAspLeuIleAsnValSerValProIleGlyIleThrPheGluArgPheSer 840
 DB 103278 GATAGCGGTGATTAATTAACGCTCTGTGCTATGGAATACCTTCGAGAGATCTCG 103219
 QY 841 ArgAsnGluArgAlaSerTyrGluAlaThrValIleTyrValAlaAspValTyrArgLys 860
 DB 103218 AGAACGAGCGTGGCTCTTACGAAGCTACTGTCTATCTACGTTGCCGATGTCTATCGTAAG 103159
 QY 861 AsnProAspCysThrThrAlaLeuLeuIleAsnAsnThrSerTyrPheThrGlyThr 880
 DB 103158 AATCCTGACTGCACGACAGCTCTCTTAATCAACATACCTCGTGGAAACATACAGGAACG 103099
 QY 881 AsnLeuSerArgGlnAlaGlyIleGlyArgAlaGlyIlePheTyrAlaPheSerProAsn 900
 DB 103098 AATCTCAACACAGCTGGTATCGGAAGACGAGGATCTTTTATGCTTCTCTCCAAAT 103039
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 QY 921 AspLeuGlyGlyLysPheGlnPhe 928
 DB 102978 GATCTGGAGTAAGTTCACGTTTC 102955

RESULT 5
 AAX06822 standard; DNA; 2787 BP.
 XX AAX06822;
 AC AAX06822;
 DT 26-APR-1999 (first entry)
 XX Chlamydia pneumoniae surface exposed protein Omp10 DNA.
 DE Omp10; outer membrane protein 10; surface exposed protein; antigen;
 KW infection; diagnosis; vaccine; atherosclerosis; asthma; ss.
 XX Chlamydia pneumoniae.
 OS W09858953-A2.
 FN 30-DEC-1998.
 XX 19-JUN-1998; 98WO-DK00266.
 XX 23-JUN-1997; 97DK-0000744.
 PR (BIRK/) BIRKELUND S.
 PA (CHRI/) CHRISTIANSEN G.
 XX Birkelund S, Christiansen G, Knudsen K, Madsen A;
 PI Mygind P;
 XX WPI; 1999-105610/09.
 DR P-PSDB; AAW88423.
 XX Species-specific test for identifying mammals infected with
 PT Chlamydia pneumoniae - comprises detecting antibodies specific for
 PT outer membrane proteins of C. pneumoniae or nucleic acids encoding
 PT these proteins
 XX Claim 6; Page 59; 115pp; English.
 PS This DNA sequence codes for the novel 98.4 kDa surface exposed
 CC protein Omp10 (see AAW88423) of the human respiratory pathogen
 CC Chlamydia pneumoniae. By generating antibodies against C.
 CC pneumoniae outer membrane complex, a polyclonal antibody (PAB 150)
 CC was obtained which reacted with outer membrane proteins. The
 CC antibody was used to identify the genes (see AAX06816-27) encoding

CC Omp4-Omp15 proteins (see AAW88417-28) in an expression library of
 CC C. pneumoniae DNA. The genes are situated in 2 gene clusters:
 CC Omp12,11,10,5,4,13 and 14 in one cluster and Omp6,7,8,9 and 15 in
 CC the other, and encode polypeptides of about 89,6-100.3 kDa and
 CC about 56.1 kDa. The invention provides a new species specific test
 CC for identifying mammals (including humans) infected with Chlamydia
 CC pneumoniae. The test comprises detecting antibodies specific for
 CC Omp4-Omp15 or detecting nucleic acid fragments encoding these outer
 CC membrane proteins, especially by PCR. The proteins are also used
 CC in the diagnosis of C. pneumoniae infection in mammals. The
 CC nucleic acids and proteins can also be used in the immunization of
 CC mammals, the nucleic acids being particularly useful as DNA
 CC vaccines for effecting in vivo expression of antigens. The
 CC vaccines may also prevent atherosclerosis and bronchial asthma,
 CC which are possibly associated with C. pneumoniae.
 XX SQ Sequence 2787 BP; 815 A; 689 C; 535 G; 748 T; 0 other;
 Alignment Scores:
 Pred. NO.: 0 Length: 2787
 Score: 4726.00 Matches: 922
 Percent Similarity: 99.57% Conservative: 2
 Best Local Similarity: 99.35% Mismatches: 4
 Query Match: 99.31% Indels: 0
 DB: 20 Gaps: 0
 US-09-857-128-14 (1-928) x AAX06822 (1-2787)
 QY 1 MetLysSerSerLeuHisTyrPheLeuIleSerSerLeuAlaLeuProLeuSerLeu 20
 DB 1 ATGAATCCTCTCTTCATTTGGTTGTAATTCGTCATCTTTAGCACTTCCCTGTCACTA 60
 QY 21 AsnPheSerAlaPheAlaValValGluIleAsnLeuGlyProThrAsnSerPheSer 40
 DB 61 AATTTCTCTGCTTGTGCTGCTGTTGTAATCAATCAATCTAGGACCTACCAATAGTCTCT 120
 QY 41 GlyProGlyThrTyrThrProAlaGlnThrThrAsnAlaAspGlyThrIleTyrasn 60
 DB 121 GGACCGAGAACTACACTCTCTCCAGCCCAACAAACAAATGAGTGAATATATATAAT 180
 QY 61 LeuThrGlyaspValSerIleThrAsnAlaGlySerProThrAlaLeuThrAlaSerCys 80
 DB 181 CTAACAGGGGATGCTCAATCAACCAATCGAGGATCTCCGACAGCTCAACCGTTCCTGC 240
 QY 81 PheLysGluThrThrGlyAsnLeuSerPheGlnGlyHisGlyTyrGlnPheLeuGln 100
 DB 241 TTTAACAAGAACTACTGGGAATCTTCTTCCAGGCCACGCGCTACCAATTTCTCTACAA 300
 QY 101 AsnIleAspAlaGlyAlaAsnCysThrPheThrAsnThrAlaAlaAsnLysLeuSer 120
 DB 301 AATATCGATCGGGAGGAACTGTACCTTTACCAATACAGCTGCAATAAAGCTTCTCTCC 360
 QY 121 PheSerGlyPheSerTyrLeuSerLeuIleGlnThrThrAsnAlaThrThrGlyThrGly 140
 DB 361 TTTTCAGGATTCCTATTTGTCATAATAACCAACCAAGTGTACACAGGAAACAGGA 420
 QY 141 AlaIleLysSerThrGlyAlaCysSerIleGlnSerAsnTyrSerCysTyrPheGlyGln 160
 DB 421 GCCATCAAGTCCACAGGAGCTTGTCTTATTCACTCGAATATAGTGTCTACTTGGCCAA 480
 QY 161 AsnPheSerAsnAspAsnGlyAlaLeuGlnGlySerSerIleSerLeuSerLeuAsn 180
 DB 481 AACTTTTCTAATGACAATGGAGGCGCTCCAGGCGAGCTATATAGTCTATCGTAAAC 540
 QY 181 ProAsnLeuThrPheAlaLysAsnLysAlaThrGlnLysGlyAlaLeuTyrSerThr 200
 DB 541 CCCAACCTAACGTTTGCACAAACAAAGCAACGCAAAAGGGGTGCGCTTATTTCCACG 600
 QY 201 GlyGlyIleThrIleAsnAsnThrLeuAsnSerAlaSerPheSerGluAsnThrAlaAla 220
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 QY 221 AsnAsnGlyGlyAlaIleTyrThrGluAlaSerPheIleSerSerAsnLysAlaIle 240

XX AAX91990;
 AC 13-SEP-1999 (first entry)
 DT Nucleotide sequence of the complete genome of Chlamydia pneumoniae.
 DE Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
 KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis;
 KW vaccine; neutralising epitope; ss.
 XX Chlamydia pneumoniae.
 OS WO927105-A2.
 XX 03-JUN-1999.
 XX 20-NOV-1998; 98WO-IB01890.
 XX 04-NOV-1998; 98US-0107078.
 PR 21-NOV-1997; 97FR-0014673.
 XX (GIST) GENSET.
 PA Griffais R;
 PI WPI; 1999-357842/30.
 XX Genome sequence of Chlamydia pneumoniae
 XX Claim 1; Page 291-611; 1912pp; English.
 PS The present sequence represents the complete genome of Chlamydia
 CC pneumoniae, and encodes proteins AAX34584-Y35879. C. pneumoniae causes
 CC respiratory disease such as pneumonia and bronchitis and is thought
 CC to be a contributing factor in heart disease, sarcoidosis, sinusitis,
 CC purulent otitis media, erythema nodosum or pharyngitis. The polypeptides
 CC encoded by the open reading frames of the C. pneumoniae genome (see
 CC AAX34584-Y35879) can be used in immunogenic compositions as vaccines.
 CC Vectors containing C. pneumoniae nucleotide sequences can also be
 CC used as immunogenic compositions, especially where the vector directs
 CC the expression of a neutralising epitope of C. pneumoniae.
 XX SQ Sequence 1230025 BP; 367213 A; 249833 C; 249013 G; 363589 T; 377 other;
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 Pred. NO.: 0 Length: 1230025
 Score: 4666.50 Matches: 923
 Percent Similarity: 99.46% Conservative: 0
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RESULT 7

AAA27021
 ID AAA27021 standard; DNA; 3000 BP.

AC AAA27021;

DT 11-AUG-2000 (first entry)

DE Chlamydia pneumoniae 98KD putative outer membrane protein gene.

KW Chlamydia; antigen; vaccine; infection; outer membrane protein; ds.

OS Chlamydia pneumoniae.

FH Key Location/Qualifiers

FT CDS 101..2887

FT /*tag= a

FT /product= "98kDa putative outer membrane protein"

PN WO200026237-A2.

XX 11-MAY-2000.

XX 29-OCT-1999; 99WO-GB03579.

XX 29-OCT-1998; 98US-0106070.

XX 01-MAR-1999; 99US-0122066.

XX 27-OCT-1999; 99US-0428122.

XX (CONN-) CONNAUGHT LAB LTD.

XX Murdin AD, Oomen RP, Dunn PL;

XX WPI: 2000-365569/31.

XX P-PSDB; AAY94327.

XX Novel Chlamydia 98 kDa putative outer membrane protein antigen, used for vaccination and protection against Chlamydia infection

XX Claim 1; Fig 1; 93pp; English.

CC The present sequence is the 98kDa putative outer membrane protein gene from Chlamydia pneumoniae. The genomic sequence was amplified using two PCR primers. The 5' primer contains a NotI restriction site, a ribosome binding site, an initiation codon and a sequence close to the 5' end of the 98kDa putative outer membrane protein coding sequence. The 3' primer contains the sequence encoding the C-terminal sequence of the putative outer membrane protein and a BsrGI restriction site. The stop codon was excluded and an additional nucleotide was inserted to obtain an in-frame

Aug 25 09:43:57 2003

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GenCore version 5.1.1.6
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OM protein - protein search, using sw model

Run on: August 22, 2003, 15:44:46 ; Search time 375 Seconds

(without alignments)
2153.846 Million cell updates/sec

Title: US-09-857-128-14

Perfect score: 928

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Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 5580241 seqs, 870357830 residues

Word size : 0

Total number of hits satisfying chosen parameters: 5580241

Minimum DB seq length: 0

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Post-processing: Listing first 50 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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ALIGNMENTS

RESULT 1
US-09-857-128-14
; Sequence 14, Application US/09857128
; GENERAL INFORMATION:
; APPLICANT: Aventis Pasteur Limited
; APPLICANT: Mordin et al.
; TITLE OF INVENTION: Chlamydia antigens and corresponding DNA fragments and uses
; FILE REFERENCE: 77813-2
; CURRENT APPLICATION NUMBER: US/09/857,128
; CURRENT FILING DATE: 2001-10-29
; PRIOR APPLICATION NUMBER: US 60/110,427
; PRIOR FILING DATE: 1998-12-01
; PRIOR APPLICATION NUMBER: US 60/110,438
; PRIOR FILING DATE: 1998-12-01
; PRIOR APPLICATION NUMBER: US 60/110,339
; PRIOR FILING DATE: 1998-12-01
; PRIOR APPLICATION NUMBER: US 60/110,428
; PRIOR FILING DATE: 1998-12-01
; PRIOR APPLICATION NUMBER: US 60/110,340
; PRIOR FILING DATE: 1998-12-01

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; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 14
; LENGTH: 928
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-09-857-128-14

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Db 661 GFRHISAGYVVGATTTLASDNLITAAFCQLFGKDRDHFINKNRASAYAAASHLQHLATLS 720
QY 721 SPSSLRLYLPGESQEPVLFDQAQISYIYSKNTMKYIYTOAPKGESWTDGCALEASLP 780
Db 721 SPSSLRLYLPGESQEPVLFDQAQISYIYSKNTMKYIYTOAPKGESWTDGCALEASLP 780
QY 781 HTALSHEGLFAYFPFFKVEASYIHQDSFKERNITLVRSPDGLINVSVPIGTFERFS 840
Db 781 HTALSHEGLFAYFPFFKVEASYIHQDSFKERNITLVRSPDGLINVSVPIGTFERFS 840
QY 841 RNERASYEATVIYVADVVRKNPDCTTALLINNTSWKTTGTLNSRQAGIGRAGIFAFSPN 900
Db 841 RNERASYEATVIYVADVVRKNPDCTTALLINNTSWKTTGTLNSRQAGIGRAGIFAFSPN 900
QY 901 LEVTSNLSMEIRGSSRSYNADLGKQFQ 928
```

```
Db 901 LEVTSNLSMEIRGSSRSYNADLGKQFQ 928
RESULT 2
US-10-312-273-33
; Sequence 33, Application US/10312273
; GENERAL INFORMATION:
; APPLICANT: CHIRON SpA
; TITLE OF INVENTION: IMMUNISATION AGAINST CHLAMYDIA PNEUMONIAE
; FILE REFERENCE: P025035WO
; CURRENT APPLICATION NUMBER: US/10/312.273
; PRIOR FILING DATE: 2002-12-20
; PRIOR APPLICATION NUMBER: 0016363.4
; PRIOR FILING DATE: 2000-07-03
; PRIOR APPLICATION NUMBER: 0017047.2
; PRIOR FILING DATE: 2000-07-11
; PRIOR APPLICATION NUMBER: 0017983.8
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: 0019368.0
; PRIOR FILING DATE: 2000-08-07
; PRIOR APPLICATION NUMBER: 0020440.4
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: 0022583.9
; PRIOR FILING DATE: 2000-09-14
; PRIOR APPLICATION NUMBER: 0027549.5
; PRIOR FILING DATE: 2000-11-10
; PRIOR APPLICATION NUMBER: 0031706.5
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 664
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 33
; LENGTH: 928
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-10-312-273-33
```

```
Query Match      67.3%; Score 625; DB 29; Length 928;
Best Local Similarity 99.7%; Pred. No. 0;
Matches 925; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 MKSSLHWFLISSSLALPLSLNFAFAAIVEINLGNFTNSFGPGTTPPAQTTNADGTIYN 60
Db 1 MKSSLHWFLISSSLALPLSLNFAFAAIVEINLGNFTNSFGPGTTPPAQTTNADGTIYN 60
QY 61 LTGDVSIITNAGSPALTATSCFKETTNLSTFGQHGQYQFLQNIIDAGANCTFTNTAANKLLS 120
Db 61 LTGDVSIITNAGSPALTATSCFKETTNLSTFGQHGQYQFLQNIIDAGANCTFTNTAANKLLS 120
QY 121 FSGFSYLSLIQTTNATTGTAIKSTGACSIQSNYSCYFGQNFSDNGGALOGSSISLSLN 180
Db 121 FSGFSYLSLIQTTNATTGTAIKSTGACSIQSNYSCYFGQNFSDNGGALOGSSISLSLN 180
QY 181 PNLTFAKNKATQKGGALYSTGTTINNTLNSAFSESENTAANGGAIYTEASSFISSNKAI 240
Db 181 PNLTFAKNKATQKGGALYSTGTTINNTLNSAFSESENTAANGGAIYTEASSFISSNKAI 240
QY 241 SPINNVSATATGAGAIYCSSTAPKPVLTLSDNGLNFIGNTAITSGGAIYTDNLVLS 300
Db 241 SPINNVSATATGAGAIYCSSTAPKPVLTLSDNGLNFIGNTAITSGGAIYTDNLVLS 300
QY 301 GGPTLFKNNSGYDTAAPLGGAIAIADSGLSLSALGGDITFEGNTVVKGASSSQTTRNS 360
Db 301 GGPTLFKNNSGYDTAAPLGGAIAIADSGLSLSALGGDITFEGNTVVKGASSSQTTRNS 360
QY 361 INIGNTNAKIVOLRASQONTIYFDPITTSITAAALSDALNGLPDLAGNPAYOGTIYVFSG 420
Db 361 INIGNTNAKIVOLRASQONTIYFDPITTSITAAALSDALNGLPDLAGNPAYOGTIYVFSG 420
QY 421 EKLSEAEAAEADNLKSTIQOPLTLAGGQSLKSGVTLVAKFSQSPGSLTLMADAGTTLET 480
Db 421 EKLSEAEAAEADNLKSTIQOPLTLAGGQSLKSGVTLVAKFSQSPGSLTLMADAGTTLET 480
```

QY 481 ADGITTNNLVNDSLSKETKATQASQVTLTSGSLVDPGSGNVYEDVSWNNPQVF 540
DB 481 ADGITTNNLVNDSLSKETKATQASQVTLTSGSLVDPGSGNVYEDVSWNNPQVF 540
QY 541 SCLTLTADDPANIHITDLAADPLEKNPIHWYOGNALSQWEDTATKSKAATLTWTGTGY 600
DB 541 SCLTLTADDPANIHITDLAADPLEKNPIHWYOGNALSQWEDTATKSKAATLTWTGTGY 600
QY 601 NPNPERRGTLVANTLWGSFVDRSIOQLVATKVRQSQETRGWCEGISNFFHKDSTKINK 660
DB 601 NPNPERRGTLVANTLWGSFVDRSIOQLVATKVRQSQETRGWCEGISNFFHKDSTKINK 660
QY 661 GFRHISAGYVVGATTTLASDNLITAAFCOLFGKDRDHFINKNRASAYAAASLHQLATLS 720
DB 661 GFRHISAGYVVGATTTLASDNLITAAFCOLFGKDRDHFINKNRASAYAAASLHQLATLS 720
QY 721 SPSSLRYLPGESEQVLFDAQISYIYSKNTWKTYTQAPKGESSYNDGCALELASSLP 780
DB 721 SPSSLRYLPGESEQVLFDAQISYIYSKNTWKTYTQAPKGESSYNDGCALELASSLP 780
QY 781 HTALSHEGLFHAYFPPIKVEASYIHQDSFKERNITLVRSDGDLINVSVPITGTFERFS 840
DB 781 HTALSHEGLFHAYFPPIKVEASYIHQDSFKERNITLVRSDGDLINVSVPITGTFERFS 840
QY 841 RNERASYEATVIYVADYVRKPNDCCTTALLINNTSWKTTGTNLSRQAGIGRAGIFYAFSPN 900
DB 841 RNERASYEATVIYVADYVRKPNDCCTTALLINNTSWKTTGTNLSRQAGIGRAGIFYAFSPN 900
QY 901 LEVTSNLSMEIRGSSRSYNADLGGKQF 928
DB 901 LEVTSNLSMEIRGSSRSYNADLGGKQF 928

RESULT 3

US-10-312-273-33
; Sequence 33, Application US/10312273
; GENERAL INFORMATION:
; APPLICANT: CHIRON Spa
; TITLE OF INVENTION: IMMUNISATION AGAINST CHLAMYDIA PNEUMONIAE
; FILE REFERENCE: P025035W0
; CURRENT APPLICATION NUMBER: US/10/312,273
; PRIOR FILING DATE: 2002-12-20
; PRIOR APPLICATION NUMBER: 0016363.4
; PRIOR FILING DATE: 2000-07-03
; PRIOR APPLICATION NUMBER: 0017047.2
; PRIOR FILING DATE: 2000-07-11
; PRIOR APPLICATION NUMBER: 0017983.8
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: 0019368.0
; PRIOR FILING DATE: 2000-08-07
; PRIOR APPLICATION NUMBER: 0020440.4
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: 0022583.9
; PRIOR FILING DATE: 2000-09-14
; PRIOR APPLICATION NUMBER: 0027549.5
; PRIOR FILING DATE: 2000-11-10
; PRIOR APPLICATION NUMBER: 0031706.5
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 664
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 33
; LENGTH: 928
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae

US-10-312-273-33

Query Match 67.3%; Score 625; DB 29; Length 928;
Best Local Similarity 99.7%; Pred No. 0;
Matches 925; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 MKSSLHFWLSSSLALPLSLNFSFAAWEINLGNFTNSFGSGYTPPAQTTNADGTIYN 60
DB 1 MKSSLHFWLSSSLALPLSLNFSFAAWEINLGNFTNSFGSGYTPPAQTTNADGTIYN 60

QY 61 LTGDSVITNAGSPTALTASCFKETTGNLSFQGHGYOFLQNTDAGANCTFTNTAAKLLS 120
DB 61 LTGDSVITNAGSPTALTASCFKETTGNLSFQGHGYOFLQNTDAGANCTFTNTAAKLLS 120
QY 121 FSGFSYLSLIQTNTATTGTGAIKSTGACSIQSNYSYFQGNFSDNGGALQSSISLSLN 180
DB 121 FSGFSYLSLIQTNTATTGTGAIKSTGACSIQSNYSYFQGNFSDNGGALQSSISLSLN 180
QY 181 PNLTAKNKKATOKGALYSTGGITINNTLNSAFSESENTAANGGAIYTEASSPISNKAI 240
DB 181 PNLTAKNKKATOKGALYSTGGITINNTLNSAFSESENTAANGGAIYTEASSPISNKAI 240
QY 241 SPINNSVATATGGAICYSSTSAPKPVLTLDNGELNFTGNITAITSGGAIYTDNLVLS 300
DB 241 SPINNSVATATGGAICYSSTSAPKPVLTLDNGELNFTGNITAITSGGAIYTDNLVLS 300
QY 301 GPTLTKNNSGYDTAAPLGGAIAIADSGSLSLALGGDITFEQNTVVKGASSQTTRNS 360
DB 301 GPTLTKNNSAIDTAAPLGGAIAIADSGSLSLALGGDITFEQNTVVKGASSQTTRNS 360
QY 361 INIGNTNAKIVOLRASQNTIYFYDPIITTSITAAALSDALNLANGPDLAGNPAYOGTIVFSG 420
DB 361 INIGNTNAKIVOLRASQNTIYFYDPIITTSITAAALSDALNLANGPDLAGNPAYOGTIVFSG 420
QY 421 EKLSEAAEADNLKSTIQOPLTLAGGQLSLKSGVTLVAKSFQSPGSLTLLMDAGTTLET 480
DB 421 EKLSEAAEADNLKSTIQOPLTLAGGQLSLKSGVTLVAKSFQSPGSLTLLMDAGTTLET 480
QY 481 ADGITTNNLVNDSLSKETKATQASQVTLTSGSLVDPGSGNVYEDVSWNNPQVF 540
DB 481 ADGITTNNLVNDSLSKETKATQASQVTLTSGSLVDPGSGNVYEDVSWNNPQVF 540
QY 541 SCLTLTADDPANIHITDLAADPLEKNPIHWYOGNALSQWEDTATKSKAATLTWTGTGY 600
DB 541 SCLTLTADDPANIHITDLAADPLEKNPIHWYOGNALSQWEDTATKSKAATLTWTGTGY 600
QY 601 NPNPERRGTLVANTLWGSFVDRSIOQLVATKVRQSQETRGWCEGISNFFHKDSTKINK 660
DB 601 NPNPERRGTLVANTLWGSFVDRSIOQLVATKVRQSQETRGWCEGISNFFHKDSTKINK 660
QY 661 GFRHISAGYVVGATTTLASDNLITAAFCOLFGKDRDHFINKNRASAYAAASLHQLATLS 720
DB 661 GFRHISAGYVVGATTTLASDNLITAAFCOLFGKDRDHFINKNRASAYAAASLHQLATLS 720
QY 721 SPSSLRYLPGESEQVLFDAQISYIYSKNTWKTYTQAPKGESSYNDGCALELASSLP 780
DB 721 SPSSLRYLPGESEQVLFDAQISYIYSKNTWKTYTQAPKGESSYNDGCALELASSLP 780
QY 781 HTALSHEGLFHAYFPPIKVEASYIHQDSFKERNITLVRSDGDLINVSVPITGTFERFS 840
DB 781 HTALSHEGLFHAYFPPIKVEASYIHQDSFKERNITLVRSDGDLINVSVPITGTFERFS 840
QY 841 RNERASYEATVIYVADYVRKPNDCCTTALLINNTSWKTTGTNLSRQAGIGRAGIFYAFSPN 900
DB 841 RNERASYEATVIYVADYVRKPNDCCTTALLINNTSWKTTGTNLSRQAGIGRAGIFYAFSPN 900
QY 901 LEVTSNLSMEIRGSSRSYNADLGGKQF 928
DB 901 LEVTSNLSMEIRGSSRSYNADLGGKQF 928

RESULT 4

US-10-312-273-33
; Sequence 33, Application US/10312273
; GENERAL INFORMATION:
; APPLICANT: CHIRON Spa
; TITLE OF INVENTION: IMMUNISATION AGAINST CHLAMYDIA PNEUMONIAE
; FILE REFERENCE: P025035W0
; CURRENT APPLICATION NUMBER: US/10/312,273
; CURRENT FILING DATE: 2002-12-20
; PRIOR APPLICATION NUMBER: 0016363.4
; PRIOR FILING DATE: 2000-07-03

;; PRIOR APPLICATION NUMBER: 0017047.2
;; PRIOR FILING DATE: 2000-07-11
;; PRIOR APPLICATION NUMBER: 0017983.8
;; PRIOR FILING DATE: 2000-07-21
;; PRIOR APPLICATION NUMBER: 0019368.0
;; PRIOR FILING DATE: 2000-08-07
;; PRIOR APPLICATION NUMBER: 0020440.4
;; PRIOR FILING DATE: 2000-08-18
;; PRIOR APPLICATION NUMBER: 0022583.9
;; PRIOR FILING DATE: 2000-09-14
;; PRIOR APPLICATION NUMBER: 0027549.5
;; PRIOR FILING DATE: 2000-11-10
;; PRIOR APPLICATION NUMBER: 0031706.5
;; PRIOR FILING DATE: 2000-12-22
;; NUMBER OF SEQ ID NOS: 664
;; SOFTWARE: SeqWin99, version 1.02
;; SEQ ID NO 33
;; LENGTH: 928
;; TYPE: PRT
;; ORGANISM: Chlamydia pneumoniae
US-10-312-273-33

Query Match 67.3%; Score 625; DB 29; Length 928;
Best Local Similarity 99.7%; Pred. No. 0;
Matches 925; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 MKSSLHWFLISSSLALPLSLNFSFAAFAVEINLPTNSFSGPGTYTPPAOTTNADGTIYN 60
Db 1 MKSSLHWFLISSSLALPLSLNFSFAAFAVEINLPTNSFSGPGTYTPPAOTTNADGTIYN 60

Qy 61 LTGDSVITNAGSPTALTASCFKETTGNLSFGHGYQFLLQNDAGANCTTNTAANKLLS 120
Db 61 LTGDSVITNAGSPTALTASCFKETTGNLSFGHGYQFLLQNDAGANCTTNTAANKLLS 120

Qy 121 FSGFSYLSLIOTTNATTGTAIKSTGACSIQSNYSYFCGQNFSDNGGALQSSISLSLN 180
Db 121 FSGFSYLSLIOTTNATTGTAIKSTGACSIQSNYSYFCGQNFSDNGGALQSSISLSLN 180

Qy 181 PNLTFKAKKATOKGALYSTGTGTTINNTLNSAFSENTAANGGAIYTEASSFTSSNKAI 240
Db 181 PNLTFKAKKATOKGALYSTGTGTTINNTLNSAFSENTAANGGAIYTEASSFTSSNKAI 240

Qy 241 SFINNSVTATSGAGIYCSSTSAPKPVLTLSDNGLNFIQNTAITSGGAIYTDNLVLS 300
Db 241 SFINNSVTATSGAGIYCSSTSAPKPVLTLSDNGLNFIQNTAITSGGAIYTDNLVLS 300

Qy 301 GGPTLFKNNSGYDTAAPLGGAIAIADSGSLSLALGDDITFEGNTVYKGAASSQTTTRNS 360
Db 301 GGPTLFKNNSAIDTAAPLGGGAIAIADSGSLSLALGDDITFEGNTVYKGAASSQTTTRNS 360

Qy 361 INIGNTNAKIVQLRASOGNTIYFYDPTTTSITLSDALNLPDLAGNPAYOGTIVFSG 420
Db 361 INIGNTNAKIVQLRASOGNTIYFYDPTTTSITLSDALNLPDLAGNPAYOGTIVFSG 420

Qy 421 EKLEAEAEADNLKSTIQOPLTLAGQOLSLKSGVTLVAKFSQSPGSTLLMDAGTTLET 480
Db 421 EKLEAEAEADNLKSTIQOPLTLAGQOLSLKSGVTLVAKFSQSPGSTLLMDAGTTLET 480

Qy 481 ADGTTINNLVNDLSKETKGTLKATQASQTVTLSSLSLVDPSGNVYEDVSWNPQVF 540
Db 481 ADGTTINNLVNDLSKETKGTLKATQASQTVTLSSLSLVDPSGNVYEDVSWNPQVF 540

Qy 541 SCULTLADDPANIHITDLAADPLEKNPIHWGYOGNALSWEEDTATKSKAATLTWTGTGY 600
Db 541 SCULTLADDPANIHITDLAADPLEKNPIHWGYOGNALSWEEDTATKSKAATLTWTGTGY 600

Qy 601 NPNPERRGTLVANTLWGSFVDVRSIQOLVATKVRQSQETRGIWCEGISNFFHDKSTKINK 660
Db 601 NPNPERRGTLVANTLWGSFVDVRSIQOLVATKVRQSQETRGIWCEGISNFFHDKSTKINK 660

Qy 661 GFRHISAGYVVGATTTLASDNLITAAFCQLFGKDRDHFINKNRASAYASLHLOHLATLS 720
Db 661 GFRHISAGYVVGATTTLASDNLITAAFCQLFGKDRDHFINKNRASAYASLHLOHLATLS 720

RESULT 5

US-10-312-273-33
; Sequence 33; Application US/10312273

;; GENERAL INFORMATION:
;; APPLICANT: CHIRON SpA
;; TITLE OF INVENTION: IMMUNISATION AGAINST CHLAMYDIA PNEUMONIAE
;; FILE REFERENCE: P025035WO
;; CURRENT APPLICATION NUMBER: US/10/312,273
;; PRIOR FILING DATE: 2002-12-20
;; PRIOR APPLICATION NUMBER: 0016363.4
;; PRIOR FILING DATE: 2000-07-03
;; PRIOR APPLICATION NUMBER: 0017047.2
;; PRIOR FILING DATE: 2000-07-11
;; PRIOR APPLICATION NUMBER: 0017983.8
;; PRIOR FILING DATE: 2000-07-21
;; PRIOR APPLICATION NUMBER: 0019368.0
;; PRIOR FILING DATE: 2000-08-07
;; PRIOR APPLICATION NUMBER: 0020440.4
;; PRIOR FILING DATE: 2000-08-18
;; PRIOR APPLICATION NUMBER: 0022583.9
;; PRIOR FILING DATE: 2000-09-14
;; PRIOR APPLICATION NUMBER: 0027549.5
;; PRIOR FILING DATE: 2000-11-10
;; PRIOR APPLICATION NUMBER: 0031706.5
;; PRIOR FILING DATE: 2000-12-22
;; NUMBER OF SEQ ID NOS: 664
;; SOFTWARE: SeqWin99, version 1.02
;; SEQ ID NO 33
;; LENGTH: 928
;; TYPE: PRT
;; ORGANISM: Chlamydia pneumoniae
US-10-312-273-33

Query Match 67.3%; Score 625; DB 29; Length 928;
Best Local Similarity 99.7%; Pred. No. 0;
Matches 925; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 MKSSLHWFLISSSLALPLSLNFSFAAFAVEINLPTNSFSGPGTYTPPAOTTNADGTIYN 60
Db 1 MKSSLHWFLISSSLALPLSLNFSFAAFAVEINLPTNSFSGPGTYTPPAOTTNADGTIYN 60

Qy 61 LTGDSVITNAGSPTALTASCFKETTGNLSFGHGYQFLLQNDAGANCTTNTAANKLLS 120
Db 61 LTGDSVITNAGSPTALTASCFKETTGNLSFGHGYQFLLQNDAGANCTTNTAANKLLS 120

Qy 121 FSGFSYLSLIOTTNATTGTAIKSTGACSIQSNYSYFCGQNFSDNGGALQSSISLSLN 180
Db 121 FSGFSYLSLIOTTNATTGTAIKSTGACSIQSNYSYFCGQNFSDNGGALQSSISLSLN 180

Qy 181 PNLTFKAKKATOKGALYSTGTGTTINNTLNSAFSENTAANGGAIYTEASSFTSSNKAI 240
Db 181 PNLTFKAKKATOKGALYSTGTGTTINNTLNSAFSENTAANGGAIYTEASSFTSSNKAI 240

Qy 241 SFINNSVTATSGAGIYCSSTSAPKPVLTLSDNGLNFIQNTAITSGGAIYTDNLVLS 300
Db 241 SFINNSVTATSGAGIYCSSTSAPKPVLTLSDNGLNFIQNTAITSGGAIYTDNLVLS 300


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Db 241 SFINNSVTATSGGAIYCSSTAPKPVLTLSGNGELNFIGNTAITSGGAIYTDNLVLS 300
QY 301 GGPTEFNNSGYDTAAPLGAIAIADSGSLSLGALGGDITFEQNTVVKGASSQTTRNS 360
Db 301 GGPTEFNNSAIDTAAPLGAIAIADSGSLSLGALGGDITFEQNTVVKGASSQTTRNS 360
QY 361 INIGNTNAKIVOLRASQGNITFYDPITTSITAAALSDALNLANGPDLAGNPAYOGTIVFSG 420
Db 361 INIGNTNAKIVOLRASQGNITFYDPITTSITAAALSDALNLANGPDLAGNPAYOGTIVFSG 420
QY 421 EKLSEAEAEADNLKSTIOOPTLAGGQSLKSGVTLVAKSFQSPGSTLLMDAGTTLET 480
Db 421 EKLSEAEAEADNLKSTIOOPTLAGGQSLKSGVTLVAKSFQSPGSTLLMDAGTTLET 480
QY 481 ADGITTNNLVNVDLSKETKGTAKATQASQTVTLSSGSLVDPGSGNYVEDYVSWNNPQVF 540
Db 481 ADGITTNNLVNVDLSKETKGTAKATQASQTVTLSSGSLVDPGSGNYVEDYVSWNNPQVF 540
QY 541 SCLTLTADDPANIHITDLAADPLEKNPIHWGYQGNWALSQWEDTATKSKAATLTWTKTGY 600
Db 541 SCLTLTADDPANIHITDLAADPLEKNPIHWGYQGNWALSQWEDTATKSKAATLTWTKTGY 600
QY 601 NNPERGTLVANTLWGSFVDRSIOQLVATKVRQSOETRGIWCEGISNFFHKDSTKINK 660
Db 601 NNPERGTLVANTLWGSFVDRSIOQLVATKVRQSOETRGIWCEGISNFFHKDSTKINK 660
QY 661 GFRHISAGYVVGATTTLASDNLITAAFCOLFGKDRDHFINKNRASAYASLHQLHATLS 720
Db 661 GFRHISAGYVVGATTTLASDNLITAAFCOLFGKDRDHFINKNRASAYASLHQLHATLS 720
QY 721 SPSSLRLPGSESEQPVLFDAQISYISKNTMKTYTQAPKCESSWYNDGCALEASSLP 780
Db 721 SPSSLRLPGSESEQPVLFDAQISYISKNTMKTYTQAPKCESSWYNDGCALEASSLP 780
QY 781 HTALSHEGLFHAYFPFIKVEASYIHQDSFKERNITLVRSDGDLINVPIGITTFERS 840
Db 781 HTALSHEGLFHAYFPFIKVEASYIHQDSFKERNITLVRSDGDLINVPIGITTFERS 840
QY 841 RNERASYEATVIYVADVTRKKNPDCTTALLINNTSWKTTGTNLSRQAGIGRAGIFYAFSPN 900
Db 841 RNERASYEATVIYVADVTRKKNPDCTTALLINNTSWKTTGTNLSRQAGIGRAGIFYAFSPN 900
QY 901 LEVTSNLSMEIRGSSRSYNADLGKGFQF 928
Db 901 LEVTSNLSMEIRGSSRSYNADLGKGFQF 928

```

RESULT 6

```

; Sequence 33, Application US/10312273
; GENERAL INFORMATION:
; APPLICANT: CHIRON Spa
; TITLE OF INVENTION: IMMUNISATION AGAINST CHLAMYDIA PNEUMONIAE
; FILE REFERENCE: P025035W0
; CURRENT APPLICATION NUMBER: US/10/312,273
; CURRENT FILING DATE: 2002-12-20
; PRIOR APPLICATION NUMBER: 0016363.4
; PRIOR FILING DATE: 2000-07-03
; PRIOR APPLICATION NUMBER: 0017047.2
; PRIOR FILING DATE: 2000-07-11
; PRIOR APPLICATION NUMBER: 0017983.8
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: 0019368.0
; PRIOR FILING DATE: 2000-08-07
; PRIOR APPLICATION NUMBER: 0020440.4
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: 0022583.9
; PRIOR FILING DATE: 2000-09-14
; PRIOR APPLICATION NUMBER: 0027549.5
; PRIOR FILING DATE: 2000-11-10
; PRIOR APPLICATION NUMBER: 0031706.5
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 664

```

```

; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 33
; LENGTH: 928
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
; US-10-312-273-33

```

```

Query Match 67.3%; Score 625; DB 29; Length 928;
Best Local Similarity 99.7%; Pred. No. 0;
Matches 925; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

```

QY 1 MKSSLHWFLLISSSLALPLSLNFSAPAAVVEINLGPTNSFGPGTYTPPAQTNNADGTIYN 60
Db 1 MKSSLHWFLLISSSLALPLSLNFSAPAAVVEINLGPTNSFGPGTYTPPAQTNNADGTIYN 60
QY 61 LTGDSVITNAGSPALTATASCFTETGTLNLSFQGHGYOFLQNLIDAGANCFTTNTAANKLLS 120
Db 61 LTGDSVITNAGSPALTATASCFTETGTLNLSFQGHGYOFLQNLIDAGANCFTTNTAANKLLS 120
QY 121 FSGFYSLSLIQTNATTGTGAIKSTGACISIQSNYSCYFQGNFSDNDGALQSSISLSLN 180
Db 121 FSGFYSLSLIQTNATTGTGAIKSTGACISIQSNYSCYFQGNFSDNDGALQSSISLSLN 180
QY 181 PNLTEAKNKATOKGALYSTGCIITNNTLNSASFSENTAANGGAIYTEASSFISNKAI 240
Db 181 PNLTEAKNKATOKGALYSTGCIITNNTLNSASFSENTAANGGAIYTEASSFISNKAI 240
QY 241 SFINNSVTATSGGAIYCSSTAPKPVLTLSGNGELNFIGNTAITSGGAIYTDNLVLS 300
Db 241 SFINNSVTATSGGAIYCSSTAPKPVLTLSGNGELNFIGNTAITSGGAIYTDNLVLS 300
QY 301 GGPTEFNNSGYDTAAPLGAIAIADSGSLSLGALGGDITFEQNTVVKGASSQTTRNS 360
Db 301 GGPTEFNNSAIDTAAPLGAIAIADSGSLSLGALGGDITFEQNTVVKGASSQTTRNS 360
QY 361 INIGNTNAKIVOLRASQGNITFYDPITTSITAAALSDALNLANGPDLAGNPAYOGTIVFSG 420
Db 361 INIGNTNAKIVOLRASQGNITFYDPITTSITAAALSDALNLANGPDLAGNPAYOGTIVFSG 420
QY 421 EKLSEAEAEADNLKSTIOOPTLAGGQSLKSGVTLVAKSFQSPGSTLLMDAGTTLET 480
Db 421 EKLSEAEAEADNLKSTIOOPTLAGGQSLKSGVTLVAKSFQSPGSTLLMDAGTTLET 480
QY 481 ADGITTNNLVNVDLSKETKGTAKATQASQTVTLSSGSLVDPGSGNYVEDYVSWNNPQVF 540
Db 481 ADGITTNNLVNVDLSKETKGTAKATQASQTVTLSSGSLVDPGSGNYVEDYVSWNNPQVF 540
QY 541 SCLTLTADDPANIHITDLAADPLEKNPIHWGYQGNWALSQWEDTATKSKAATLTWTKTGY 600
Db 541 SCLTLTADDPANIHITDLAADPLEKNPIHWGYQGNWALSQWEDTATKSKAATLTWTKTGY 600
QY 601 NNPERGTLVANTLWGSFVDRSIOQLVATKVRQSOETRGIWCEGISNFFHKDSTKINK 660
Db 601 NNPERGTLVANTLWGSFVDRSIOQLVATKVRQSOETRGIWCEGISNFFHKDSTKINK 660
QY 661 GFRHISAGYVVGATTTLASDNLITAAFCOLFGKDRDHFINKNRASAYASLHQLHATLS 720
Db 661 GFRHISAGYVVGATTTLASDNLITAAFCOLFGKDRDHFINKNRASAYASLHQLHATLS 720
QY 721 SPSSLRLPGSESEQPVLFDAQISYISKNTMKTYTQAPKCESSWYNDGCALEASSLP 780
Db 721 SPSSLRLPGSESEQPVLFDAQISYISKNTMKTYTQAPKCESSWYNDGCALEASSLP 780
QY 781 HTALSHEGLFHAYFPFIKVEASYIHQDSFKERNITLVRSDGDLINVPIGITTFERS 840
Db 781 HTALSHEGLFHAYFPFIKVEASYIHQDSFKERNITLVRSDGDLINVPIGITTFERS 840
QY 841 RNERASYEATVIYVADVTRKKNPDCTTALLINNTSWKTTGTNLSRQAGIGRAGIFYAFSPN 900
Db 841 RNERASYEATVIYVADVTRKKNPDCTTALLINNTSWKTTGTNLSRQAGIGRAGIFYAFSPN 900
QY 901 LEVTSNLSMEIRGSSRSYNADLGKGFQF 928

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QY 61 LTGDSITNAGSPALTATSCFKETTNLSPFGHGYOFLQNDIDAGANCTTNTAANKLLS 120
Db 61 LTGDSITNAGSPALTATSCFKETTNLSPFGHGYOFLQNDIDAGANCTTNTAANKLLS 120
QY 121 FSGFSYLSLIQTTNATGTGAISTGACSIQSNYSCYFGQNFNDNGALQSGSSISLSLN 180
Db 121 FSGFSYLSLIQTTNATGTGAISTGACSIQSNYSCYFGQNFNDNGALQSGSSISLSLN 180
QY 181 PNLTFAKNKATOKGALYSTGGITINNTLNSASFSENTAANGGAIYTEASSFISNNKAI 240
Db 181 PNLTFAKNKATOKGALYSTGGITINNTLNSASFSENTAANGGAIYTEASSFISNNKAI 240
QY 241 SFINNSVTATSGGAIYCSSTAPKPVLTLSNGELNFTGNTAITSGGAIYTDNLVLS 300
Db 241 SFINNSVTATSGGAIYCSSTAPKPVLTLSNGELNFTGNTAITSGGAIYTDNLVLS 300
QY 301 GPTLFKNNSGYDTAAPLGGAIAIADSGSLSLALGGDITFEQNTVVKGASSQTTRNS 360
Db 301 GPTLFKNNSGYDTAAPLGGAIAIADSGSLSLALGGDITFEQNTVVKGASSQTTRNS 360
QY 361 INIGNTNAKIVQLRASOGNTIYFYDPIITTSITAALSDALNNGPDLAGNPAYOGTIVFSG 420
Db 361 INIGNTNAKIVQLRASOGNTIYFYDPIITTSITAALSDALNNGPDLAGNPAYOGTIVFSG 420
QY 421 EKLSEAEAAEADNLKSTIQOPLTLAGGQSLKSGVTLVAKSFQSGSTLLMDAGTTLET 480
Db 421 EKLSEAEAAEADNLKSTIQOPLTLAGGQSLKSGVTLVAKSFQSGSTLLMDAGTTLET 480
QY 481 ADGITINNLVNDLSKETKKTATKATQASQVTLTSGSLSLVDPGSGNYEDVSWNNPQVF 540
Db 481 ADGITINNLVNDLSKETKKTATKATQASQVTLTSGSLSLVDPGSGNYEDVSWNNPQVF 540
QY 541 SCLTLTADDDPANIHITDLAADPLEKNPIHWGQGNWALSQWEDTATKSKAATLTWTKTGY 600
Db 541 SCLTLTADDDPANIHITDLAADPLEKNPIHWGQGNWALSQWEDTATKSKAATLTWTKTGY 600
QY 601 NPNERRGTLVANTLWGSFVDVRSIQOVLVATKVRQSOETRGTWCEGINSFHKDSTKINK 660
Db 601 NPNERRGTLVANTLWGSFVDVRSIQOVLVATKVRQSOETRGTWCEGINSFHKDSTKINK 660
QY 661 GFRHISAGYVVGATTTLASDNLITAAFCOLFCKDRDHFINKNRASAYASLHLOHLATLS 720
Db 661 GFRHISAGYVVGATTTLASDNLITAAFCOLFCKDRDHFINKNRASAYASLHLOHLATLS 720
QY 721 SPILLRYLPGESEOPVLFDAGISYISKNTMKTYTQAPKGSWYNDGCALELASSLP 780
Db 721 SPILLRYLPGESEOPVLFDAGISYISKNTMKTYTQAPKGSWYNDGCALELASSLP 780
QY 781 HTALSHGELFHAYFPFIKVEASYIHQDSFKERNITLVRSDGDLINVSVPIGITFERFS 840
Db 781 HTALSHGELFHAYFPFIKVEASYIHQDSFKERNITLVRSDGDLINVSVPIGITFERFS 840
QY 841 RNERASYEATVIYADVVRKPNDCPTALLINNTSWKTTGNTLSROAGIGRAGIFYAFSPN 900
Db 841 RNERASYEATVIYADVVRKPNDCPTALLINNTSWKTTGNTLSROAGIGRAGIFYAFSPN 900
QY 901 LEVTSNLWEIRGSSRSYNADLGGKQF 928
Db 901 LEVTSNLWEIRGSSRSYNADLGGKQF 928

```

RESULT 9

```

US-10-312-273-33
; Sequence 33, Application. US/10312273
; GENERAL INFORMATION:
; APPLICANT: CHIRON SPA
; TITLE OF INVENTION: IMMUNISATION AGAINST CHLAMYDIA PNEUMONIAE
; FILE REFERENCE: P025035WO
; CURRENT APPLICATION NUMBER: US/10/312,273
; CURRENT FILING DATE: 2002-12-20
; PRIOR APPLICATION NUMBER: 0016363.4
; PRIOR FILING DATE: 2000-07-03
; PRIOR APPLICATION NUMBER: 0017047.2

```

```

; PRIOR FILING DATE: 2000-07-11
; PRIOR APPLICATION NUMBER: 0017983.8
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: 0019368.0
; PRIOR FILING DATE: 2000-08-07
; PRIOR APPLICATION NUMBER: 0020440.4
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: 0022583.9
; PRIOR FILING DATE: 2000-09-14
; PRIOR APPLICATION NUMBER: 0027549.5
; PRIOR FILING DATE: 2000-11-10
; PRIOR APPLICATION NUMBER: 0031706.5
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 664
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 33
; LENGTH: 928
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-10-312-273-33

```

```

Query Match 67.3%; Score 625; DB 29; Length 928;
Best Local Similarity 99.7%; Pred. NO. 0;
Matches 925; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1 MKSSLHWFLISSLSLPLSLNFSFAAAYVEINLGPNTNSFSGPGTYTPPAQTTNADGTIYN 60
Db 1 MKSSLHWFLISSLSLPLSLNFSFAAAYVEINLGPNTNSFSGPGTYTPPAQTTNADGTIYN 60
QY 61 LTGDSITNAGSPALTATSCFKETTNLSPFGHGYOFLQNDIDAGANCTTNTAANKLLS 120
Db 61 LTGDSITNAGSPALTATSCFKETTNLSPFGHGYOFLQNDIDAGANCTTNTAANKLLS 120
QY 121 FSGFSYLSLIQTTNATGTGAISTGACSIQSNYSCYFGQNFNDNGALQSGSSISLSLN 180
Db 121 FSGFSYLSLIQTTNATGTGAISTGACSIQSNYSCYFGQNFNDNGALQSGSSISLSLN 180
QY 181 PNLTFAKNKATOKGALYSTGGITINNTLNSASFSENTAANGGAIYTEASSFISNNKAI 240
Db 181 PNLTFAKNKATOKGALYSTGGITINNTLNSASFSENTAANGGAIYTEASSFISNNKAI 240
QY 241 SFINNSVTATSGGAIYCSSTAPKPVLTLSNGELNFTGNTAITSGGAIYTDNLVLS 300
Db 241 SFINNSVTATSGGAIYCSSTAPKPVLTLSNGELNFTGNTAITSGGAIYTDNLVLS 300
QY 301 GPTLFKNNSGYDTAAPLGGAIAIADSGSLSLALGGDITFEQNTVVKGASSQTTRNS 360
Db 301 GPTLFKNNSGYDTAAPLGGAIAIADSGSLSLALGGDITFEQNTVVKGASSQTTRNS 360
QY 361 INIGNTNAKIVQLRASOGNTIYFYDPIITTSITAALSDALNNGPDLAGNPAYOGTIVFSG 420
Db 361 INIGNTNAKIVQLRASOGNTIYFYDPIITTSITAALSDALNNGPDLAGNPAYOGTIVFSG 420
QY 421 EKLSEAEAAEADNLKSTIQOPLTLAGGQSLKSGVTLVAKSFQSGSTLLMDAGTTLET 480
Db 421 EKLSEAEAAEADNLKSTIQOPLTLAGGQSLKSGVTLVAKSFQSGSTLLMDAGTTLET 480
QY 481 ADGITINNLVNDLSKETKKTATKATQASQVTLTSGSLSLVDPGSGNYEDVSWNNPQVF 540
Db 481 ADGITINNLVNDLSKETKKTATKATQASQVTLTSGSLSLVDPGSGNYEDVSWNNPQVF 540
QY 541 SCLTLTADDDPANIHITDLAADPLEKNPIHWGQGNWALSQWEDTATKSKAATLTWTKTGY 600
Db 541 SCLTLTADDDPANIHITDLAADPLEKNPIHWGQGNWALSQWEDTATKSKAATLTWTKTGY 600
QY 601 NPNERRGTLVANTLWGSFVDVRSIQOVLVATKVRQSOETRGTWCEGINSFHKDSTKINK 660
Db 601 NPNERRGTLVANTLWGSFVDVRSIQOVLVATKVRQSOETRGTWCEGINSFHKDSTKINK 660
QY 661 GFRHISAGYVVGATTTLASDNLITAAFCOLFCKDRDHFINKNRASAYASLHLOHLATLS 720
Db 661 GFRHISAGYVVGATTTLASDNLITAAFCOLFCKDRDHFINKNRASAYASLHLOHLATLS 720

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```
QY 721 SPSLLRYPGSESEQVLFDAQISYISKNTMKTYTTOAPKGESSWYNDGCALELASSLP 780
|||||
Db 721 SPSLLRYPGSESEQVLFDAQISYISKNTMKTYTTOAPKGESSWYNDGCALELASSLP 780
QY 781 HTALSHEGLFHAYFPFIKVEASYIHODSFKERNTTLVRSFSDGLINVSPIGTFERFS 840
|||||
Db 781 HTALSHEGLFHAYFPFIKVEASYIHODSFKERNTTLVRSFSDGLINVSPIGTFERFS 840
QY 841 RNERASYEATVIYVADYVRKPNDCCTALLINNTSKTTGTNLSRQAGIGRAGIFYAFSPN 900
|||||
Db 841 RNERASYEATVIYVADYVRKPNDCCTALLINNTSKTTGTNLSRQAGIGRAGIFYAFSPN 900
QY 901 LEVTSNLSMEIRGSSRSYNADLGKGFQF 928
|||||
Db 901 LEVTSNLSMEIRGSSRSYNADLGKGFQF 928

RESULT 10
US-10-312-273-33
; Sequence 33, Application US/10312273
; GENERAL INFORMATION:
; APPLICANT: CHIRON SpA
; TITLE OF INVENTION: IMMUNISATION AGAINST CHLAMYDIA PNEUMONIAE
; FILE REFERENCE: P025035WO
; CURRENT FILING DATE: 2002-12-20
; PRIOR APPLICATION NUMBER: US/10/312,273
; PRIOR FILING DATE: 2002-12-20
; PRIOR APPLICATION NUMBER: 0016363.4
; PRIOR FILING DATE: 2000-07-03
; PRIOR APPLICATION NUMBER: 0017047.2
; PRIOR FILING DATE: 2000-07-11
; PRIOR APPLICATION NUMBER: 0017983.8
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: 0019368.0
; PRIOR FILING DATE: 2000-08-07
; PRIOR APPLICATION NUMBER: 0020440.4
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: 0022583.9
; PRIOR FILING DATE: 2000-09-14
; PRIOR APPLICATION NUMBER: 0027549.5
; PRIOR FILING DATE: 2000-11-10
; PRIOR APPLICATION NUMBER: 0031706.5
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 664
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 33
; LENGTH: 928
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-10-312-273-33

Query Match 67.3%; Score 625; DB 29; Length 928;
Best Local Similarity 99.7%; Pred. No. 0;
Matches 925; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 MKSSLHFWLPISSSLALPLSLNFSFAAVEINLGPNTSFGSGYTPPAQTTNADGTIYN 60
|||||
Db 1 MKSSLHFWLPISSSLALPLSLNFSFAAVEINLGPNTSFGSGYTPPAQTTNADGTIYN 60
QY 61 LTGDSVITNAGSPALTASCCKETGNLSFGCHGYQFLQNDAGANTFTNTAANKLLS 120
|||||
Db 61 LTGDSVITNAGSPALTASCCKETGNLSFGCHGYQFLQNDAGANTFTNTAANKLLS 120
QY 121 FSGFSYLSLIQTTNATGTGAIKSTGACISQNSYSCYFGQNFSDNGCALOGSSISLSLN 180
|||||
Db 121 FSGFSYLSLIQTTNATGTGAIKSTGACISQNSYSCYFGQNFSDNGCALOGSSISLSLN 180
QY 181 PNLTFAKNKATQKGALYSTGKITNNTLNSAFSESENTAANGGAIYTEASSFTSSNKAI 240
|||||
Db 181 PNLTFAKNKATQKGALYSTGKITNNTLNSAFSESENTAANGGAIYTEASSFTSSNKAI 240
QY 241 SFINNSVTATSGAICYCSSTSAPKPVLTLSDNGLNFIQNTAITSGGAIYTDNLVLS 300
|||||
Db 241 SFINNSVTATSGAICYCSSTSAPKPVLTLSDNGLNFIQNTAITSGGAIYTDNLVLS 300
```

```
QY 301 GGPTLFKNNSGYDTAAPLGGAIAIADSGLSLSALGGDITTEGNTVVKGASSSQTTRNS 360
|||||
Db 301 GGPTLFKNNSGYDTAAPLGGAIAIADSGLSLSALGGDITTEGNTVVKGASSSQTTRNS 360
QY 361 INIGNTNAKIVOLRASOGNTIYFYDPTITTSITAALSDALNGLNPDLAGNPAYQGTIVFSG 420
|||||
Db 361 INIGNTNAKIVOLRASOGNTIYFYDPTITTSITAALSDALNGLNPDLAGNPAYQGTIVFSG 420
QY 421 EKLSEAAEADNKLKSTIQOPLTLAGGOLSLKSGVTLVAKSFGSPGSLTMDAGTTLET 480
|||||
Db 421 EKLSEAAEADNKLKSTIQOPLTLAGGOLSLKSGVTLVAKSFGSPGSLTMDAGTTLET 480
QY 481 ADGITINNVLNVDLSLTKETKKATKATQASQTVTLSGSLSLVDPSGNYVEDVSNPNQVF 540
|||||
Db 481 ADGITINNVLNVDLSLTKETKKATKATQASQTVTLSGSLSLVDPSGNYVEDVSNPNQVF 540
QY 541 SCLTLTADDPANIHTDLAADPLEKNPIHNGYQGNWALSQWEDTATKSKAATLTWTKGY 600
|||||
Db 541 SCLTLTADDPANIHTDLAADPLEKNPIHNGYQGNWALSQWEDTATKSKAATLTWTKGY 600
QY 601 NPNERGTLVANTLWGSFVDVRSIQOLVATKVRQSQETRGICWEGISNFFHKDSTKINK 660
|||||
Db 601 NPNERGTLVANTLWGSFVDVRSIQOLVATKVRQSQETRGICWEGISNFFHKDSTKINK 660
QY 661 GFRHISAGYVVGATTTLASDNLITAAFCOLFGKDRDHFINKNRASAYASLHLOHLATLS 720
|||||
Db 661 GFRHISAGYVVGATTTLASDNLITAAFCOLFGKDRDHFINKNRASAYASLHLOHLATLS 720
QY 721 SPSLLRYPGSESEQVLFDAQISYISKNTMKTYTTOAPKGESSWYNDGCALELASSLP 780
|||||
Db 721 SPSLLRYPGSESEQVLFDAQISYISKNTMKTYTTOAPKGESSWYNDGCALELASSLP 780
QY 781 HTALSHEGLFHAYFPFIKVEASYIHODSFKERNTTLVRSFSDGLINVSPIGTFERFS 840
|||||
Db 781 HTALSHEGLFHAYFPFIKVEASYIHODSFKERNTTLVRSFSDGLINVSPIGTFERFS 840
QY 841 RNERASYEATVIYVADYVRKPNDCCTALLINNTSKTTGTNLSRQAGIGRAGIFYAFSPN 900
|||||
Db 841 RNERASYEATVIYVADYVRKPNDCCTALLINNTSKTTGTNLSRQAGIGRAGIFYAFSPN 900
QY 901 LEVTSNLSMEIRGSSRSYNADLGKGFQF 928
|||||
Db 901 LEVTSNLSMEIRGSSRSYNADLGKGFQF 928
```

```
RESULT 11
US-09-438-185-449
; Sequence 449, Application US/09438185
; GENERAL INFORMATION:
; APPLICANT: Stephens, Richard
; APPLICANT: Mitchell, Wayne
; APPLICANT: Kalman, Sue
; APPLICANT: Davis, Ronald
; TITLE OF INVENTION: The Regents of the University of California
; FILE REFERENCE: 018941-000411US
; CURRENT APPLICATION NUMBER: US/09/438,185
; CURRENT FILING DATE: 1999-11-11
; PRIOR APPLICATION NUMBER: US 60/108,279
; PRIOR FILING DATE: 1998-11-12
; PRIOR APPLICATION NUMBER: US 60/128,606
; PRIOR FILING DATE: 1999-04-08
; NUMBER OF SEQ ID NOS: 1074
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 449
; LENGTH: 937
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-09-438-185-449

Query Match 67.3%; Score 625; DB 18; Length 937;
Best Local Similarity 99.7%; Pred. No. 0;
```

```
Matches 925; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1 MKSSLHWFILSSSLALPLSLNFAFAAIVEINLGNPTNSFGPGCTYTPPAQTTNADGTIYN 60
Db 10 MKSSLHWFILSSSLALPLSLNFAFAAIVEINLGNPTNSFGPGCTYTPPAQTTNADGTIYN 69
QY 61 LTGDVSIITNAGSPALTATSCFETTGKNSLFGQHGQYQFLQNDAGANCTFTTAANKLLS 120
Db 70 LTGDVSIITNAGSPALTATSCFETTGKNSLFGQHGQYQFLQNDAGANCTFTTAANKLLS 129
QY 121 FSGFSYLSLIQTTNATTGTAIKSTGACSIQSNYSCYFGQNSDNGALQSGSSISLSLN 180
Db 130 FSGFSYLSLIQTTNATTGTAIKSTGACSIQSNYSCYFGQNSDNGALQSGSSISLSLN 189
QY 181 PNLTFAKNKATOKGGALYSTGGITINNTLNSAFSENTAANGGAIYTBASSFISNKA 240
Db 190 PNLTFAKNKATOKGGALYSTGGITINNTLNSAFSENTAANGGAIYTBASSFISNKA 249
QY 241 SPINNSVTATSGGAIYCSSTAPKPVLTLSDNGLNFIQNTAITSQGAITYDNLVLS 300
Db 250 SPINNSVTATSGGAIYCSSTAPKPVLTLSDNGLNFIQNTAITSQGAITYDNLVLS 309
QY 301 GGPTLFKNNSGYDTAAPLGGAIAIADSGSLSLALGGDITFEGNTVVKGASSSQTTRNS 360
Db 310 GGPTLFKNNSAIDTAAPLGGAIAIADSGSLSLALGGDITFEGNTVVKGASSSQTTRNS 369
QY 361 INIGNTNAKIVOLRASQNTIYFYDPIITTSITAALSDALNGLPDLAGNPAYQGTIVFSG 420
Db 370 INIGNTNAKIVOLRASQNTIYFYDPIITTSITAALSDALNGLPDLAGNPAYQGTIVFSG 429
QY 421 EKLSEAAEAADNLKSTIQOPLTLAGGQSLKSGVTLVAKSFQSGPSTLLMDAGTTLET 480
Db 430 EKLSEAAEAADNLKSTIQOPLTLAGGQSLKSGVTLVAKSFQSGPSTLLMDAGTTLET 489
QY 481 ADGITINNLVNDLSKETKKGTLKATQASQVTLTSGSLSLVDPGSGNYEDYSWNPQVF 540
Db 490 ADGITINNLVNDLSKETKKGTLKATQASQVTLTSGSLSLVDPGSGNYEDYSWNPQVF 549
QY 541 SCLTLTADDPANIHITDLAADPLEKNPIHWGQOGNWLWSQEDTATKKAATLTWTKGY 600
Db 550 SCLTLTADDPANIHITDLAADPLEKNPIHWGQOGNWLWSQEDTATKKAATLTWTKGY 609
QY 601 NPENRRGTLVANTLWGSFVDVRSIQOLVATKVRQSOETRGIWCEGINSFFHKDSTKINK 660
Db 610 NPENRRGTLVANTLWGSFVDVRSIQOLVATKVRQSOETRGIWCEGINSFFHKDSTKINK 669
QY 661 GFRHISAGVYVVGATTTLASDNLITAAFCQLFKGKDRDHFINKNRASAYAAASLHQLATLS 720
Db 670 GFRHISAGVYVVGATTTLASDNLITAAFCQLFKGKDRDHFINKNRASAYAAASLHQLATLS 729
QY 721 SPILLRYLPGSESEQPVLFDAQISYISKNTMKTYTQAPKCESSWYNDGCALEASSLP 780
Db 730 SPILLRYLPGSESEQPVLFDAQISYISKNTMKTYTQAPKCESSWYNDGCALEASSLP 789
QY 781 HTALSHGELFHAYFFPIKVEASYIHQDSFKERNITLVRSFSDGLINVSVPIGITFERFS 840
Db 790 HTALSHGELFHAYFFPIKVEASYIHQDSFKERNITLVRSFSDGLINVSVPIGITFERFS 849
QY 841 RNERASYEATVIYADVVRKKNPDCTTALLINNTSKTTGTNLSRQAGICRAGIFYAFSPN 900
Db 850 RNERASYEATVIYADVVRKKNPDCTTALLINNTSKTTGTNLSRQAGICRAGIFYAFSPN 909
QY 901 LEVTNLSMEIRGSSRSYNADLGGKQFQ 928
Db 910 LEVTNLSMEIRGSSRSYNADLGGKQFQ 937
```

RESULT 12

US-09-438-185A-449
; Sequence 449, Application US/09438185A
; GENERAL INFORMATION:
; APPLICANT: Stephens, Richard
; APPLICANT: Mitchell, Wayne

```
; APPLICANT: Kalman, Sue  
; APPLICANT: Davis, Ronald  
; APPLICANT: The Regents of the University of California  
; TITLE OF INVENTION: Chlamydia Pneumoniae Genome Sequence  
; FILE REFERENCE: 018941-000411US  
; CURRENT APPLICATION NUMBER: US/09/438,185A  
; CURRENT FILING DATE: 2002-03-13  
; PRIOR APPLICATION NUMBER: US 60/108,279  
; PRIOR FILING DATE: 1998-11-12  
; PRIOR APPLICATION NUMBER: US 60/128,606  
; PRIOR FILING DATE: 1999-04-08  
; NUMBER OF SEQ ID NOS: 1074  
; SOFTWARE: FASTSEQ for Windows Version 3.0  
; SEQ ID NO 449  
; LENGTH: 937  
; TYPE: PRG  
; ORGANISM: Chlamydia pneumoniae  
; FEATURE:  
; OTHER INFORMATION: CPn0447  
; US-09-438-185A-449
```

```
Query Match 67.3%; Score 625; DB 18; Length 937;  
Best Local Similarity 99.7%; Pred. No. 0;  
Matches 925; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1 MKSSLHWFILSSSLALPLSLNFAFAAIVEINLGNPTNSFGPGCTYTPPAQTTNADGTIYN 60  
Db 10 MKSSLHWFILSSSLALPLSLNFAFAAIVEINLGNPTNSFGPGCTYTPPAQTTNADGTIYN 69  
QY 61 LTGDVSIITNAGSPALTATSCFETTGKNSLFGQHGQYQFLQNDAGANCTFTTAANKLLS 120  
Db 70 LTGDVSIITNAGSPALTATSCFETTGKNSLFGQHGQYQFLQNDAGANCTFTTAANKLLS 129  
QY 121 FSGFSYLSLIQTTNATTGTAIKSTGACSIQSNYSCYFGQNSDNGALQSGSSISLSLN 180  
Db 130 FSGFSYLSLIQTTNATTGTAIKSTGACSIQSNYSCYFGQNSDNGALQSGSSISLSLN 189  
QY 181 PNLTFAKNKATOKGGALYSTGGITINNTLNSAFSENTAANGGAIYTBASSFISNKA 240  
Db 190 PNLTFAKNKATOKGGALYSTGGITINNTLNSAFSENTAANGGAIYTBASSFISNKA 249  
QY 241 SPINNSVTATSGGAIYCSSTAPKPVLTLSDNGLNFIQNTAITSQGAITYDNLVLS 300  
Db 250 SPINNSVTATSGGAIYCSSTAPKPVLTLSDNGLNFIQNTAITSQGAITYDNLVLS 309  
QY 301 GGPTLFKNNSGYDTAAPLGGAIAIADSGSLSLALGGDITFEGNTVVKGASSSQTTRNS 360  
Db 310 GGPTLFKNNSAIDTAAPLGGAIAIADSGSLSLALGGDITFEGNTVVKGASSSQTTRNS 369  
QY 361 INIGNTNAKIVOLRASQNTIYFYDPIITTSITAALSDALNGLPDLAGNPAYQGTIVFSG 420  
Db 370 INIGNTNAKIVOLRASQNTIYFYDPIITTSITAALSDALNGLPDLAGNPAYQGTIVFSG 429  
QY 421 EKLSEAAEAADNLKSTIQOPLTLAGGQSLKSGVTLVAKSFQSGPSTLLMDAGTTLET 480  
Db 430 EKLSEAAEAADNLKSTIQOPLTLAGGQSLKSGVTLVAKSFQSGPSTLLMDAGTTLET 489  
QY 481 ADGITINNLVNDLSKETKKGTLKATQASQVTLTSGSLSLVDPGSGNYEDYSWNPQVF 540  
Db 490 ADGITINNLVNDLSKETKKGTLKATQASQVTLTSGSLSLVDPGSGNYEDYSWNPQVF 549  
QY 541 SCLTLTADDPANIHITDLAADPLEKNPIHWGQOGNWLWSQEDTATKKAATLTWTKGY 600  
Db 550 SCLTLTADDPANIHITDLAADPLEKNPIHWGQOGNWLWSQEDTATKKAATLTWTKGY 609  
QY 601 NPENRRGTLVANTLWGSFVDVRSIQOLVATKVRQSOETRGIWCEGINSFFHKDSTKINK 660  
Db 610 NPENRRGTLVANTLWGSFVDVRSIQOLVATKVRQSOETRGIWCEGINSFFHKDSTKINK 669  
QY 661 GFRHISAGVYVVGATTTLASDNLITAAFCQLFKGKDRDHFINKNRASAYAAASLHQLATLS 720  
Db 670 GFRHISAGVYVVGATTTLASDNLITAAFCQLFKGKDRDHFINKNRASAYAAASLHQLATLS 729
```

QY 721 SPSLLRYPGSESEQPVLFDAQISYISKNTMKTYTQAPKCESSWYNDGCALASSLP 780
Db 730 SPSLLRYPGSESEQPVLFDAQISYISKNTMKTYTQAPKCESSWYNDGCALASSLP 789
QY 781 HPALSHGELFHAYFFFIKVEASYIHODSFKERNTLVRSFSGDLINVSVPIGITFERFS 840
Db 790 HPALSHGELFHAYFFFIKVEASYIHODSFKERNTLVRSFSGDLINVSVPIGITFERFS 849
QY 841 RNERASYEATVIYADVYRKPNPDCCTALLINNTSKTGTNLSRQAGIGRAGIFYAFSPN 900
Db 850 RNERASYEATVIYADVYRKPNPDCCTALLINNTSKTGTNLSRQAGIGRAGIFYAFSPN 909
QY 901 LEVTSNLSMEIRGSSRSYNADLGKQFQ 928
Db 910 LEVTSNLSMEIRGSSRSYNADLGKQFQ 937

RESULT 13

US-09-446-677B-14
; Sequence 14, Application US/09446677B
; GENERAL INFORMATION:
; APPLICANT: BIRKELUND, Svend
; CHRISTIANSEN, Gunna
; HEBSSGAARD PEDERSEN, Anna-Sofie
; MYGIND, Per
; TITLE OF INVENTION: SURFACE EXPOSED PROTEINS FROM CHLAMYDIA
; PNEUMONIAE

NUMBER OF SEQUENCES: 30

CORRESPONDENCE ADDRESS:

ADDRESSEE: BROWDY AND NEIMARK, P.L.L.C.

STREET: 624 Ninth Street, N.W., Suite 300

CITY: Washington

STATE: D.C.

COUNTRY: USA

ZIP: 20001

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent In Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/446,677B

FILING DATE: 24-Mar-2000

PRIOR APPLICATION DATA:

APPLICATION NUMBER: PCT/DK98/00266

FILING DATE: 19-JUN-1998

APPLICATION NUMBER: DK 0744/97

FILING DATE: 23-JUN-1997

ATTORNEY/AGENT INFORMATION:

NAME: COOPER, Iver P.

REGISTRATION NUMBER: 28,005

REFERENCE/DOCKET NUMBER: BIRKELUND-1

TELECOMMUNICATION INFORMATION:

TELEPHONE: 202-628-5197

TELEFAX: 202-737-3528

INFORMATION FOR SEQ ID NO: 14:

SEQUENCE CHARACTERISTICS:

LENGTH: 928 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide

SEQUENCE DESCRIPTION: SEQ ID NO: 14:

Query Match 47.0%; Score 436; DB 18; Length 928;

Best Local Similarity 99.8%; Pred. No. 0;

Matches 536; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 392 TAALSDALNLNGPDLGNPAYQGTIVFSGEKLSAEAAEADNLKSTIOOPLTLAGGQLSL 451

Db 392 TAALSDALNLNGPDLGNPAYQGTIVFSGEKLSAEAAEADNLKSTIOOPLTLAGGQLSL 451

QY 452 KSGVTLVAKSFSPGSLTMDAGTTLETADGITINNVLVNDLSLKETKKTLKATQASQ 511
Db 452 KSGVTLVAKSFSPGSLTMDAGTTLETADGITINNVLVNDLSLKETKKTLKATQASQ 511
QY 512 TVTSLGSLSLVDPGSGNYEDYSWNNPQVFSCLTTLTADDPANIHITDLAADPLEKPNIHG 571
Db 512 TVTSLGSLSLVDPGSGNYEDYSWNNPQVFSCLTTLTADDPANIHITDLAADPLEKPNIHG 571
QY 572 YQGNWALSQWEDTATKKAATLTWTGTGYNPNPERRGTLVANTLWGSFVDVRSIQOLVAT 631
Db 572 YQGNWALSQWEDTATKKAATLTWTGTGYNPNPERRGTLVANTLWGSFVDVRSIQOLVAT 631
QY 632 KVRQSOETRGIWCEGISNFFPKDSTKINKGFRHISAGYVVGATTTLASDNLIITAAFCOLF 691
Db 632 KVRQSOETRGIWCEGISNFFPKDSTKINKGFRHISAGYVVGATTTLASDNLIITAAFCOLF 691
QY 692 GKDRDHFINKNRASAYAAASLHLQHLATLSSPSLLRLYLPGSESEQPVLFDAQISYISKNT 751
Db 692 GKDRDHFINKNRASAYAAASLHLQHLATLSSPSLLRLYLPGSESEQPVLFDAQISYISKNT 751
QY 752 MKTYTQAPKCESSWYNDGCALASSLPHTALSHEGLFHAYFFFIKVEASYIHODSFKE 811
Db 752 MKTYTQAPKCESSWYNDGCALASSLPHTALSHEGLFHAYFFFIKVEASYIHODSFKE 811
QY 812 RNTTLVRSFSDGDLINVSVPIGITIFERFSRNERASYEATVIYADVYRKPNPDCCTALLIN 871
Db 812 RNTTLVRSFSDGDLINVSVPIGITIFERFSRNERASYEATVIYADVYRKPNPDCCTALLIN 871
QY 872 NTSWKTGTNLSRQAGIGRAGIFYAFSPNLEVTNLSMEIRGSSRSYNADLGKQFQ 928
Db 872 NTSWKTGTNLSRQAGIGRAGIFYAFSPNLEVTNLSMEIRGSSRSYNADLGKQFQ 928

RESULT 14

US-10-289-762-472
; Sequence 472, Application US/10289762
; GENERAL INFORMATION:

APPLICANT: Grifffais, R.

TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragm-

TITLE OF INVENTION: thereof and uses thereof, in particular for the diagnosis, p-

TITLE OF INVENTION: and treatment of infection

FILE REFERENCE: 9710-003-999

CURRENT APPLICATION NUMBER: US/10/289,762

CURRENT FILING DATE: 2003-03-27

NUMBER OF SEQ ID NOS: 6849

SEQ ID NO 472

LENGTH: 927

TYPE: PRT

ORGANISM: Chlamydia pneumoniae

FEATURE:

NAME/KEY: SITE

LOCATION: 1..927

OTHER INFORMATION: Xaa=unknown or other

US-10-289-762-472

Query Match 45.9%; Score 426; DB 28; Length 927;

Best Local Similarity 100.0%; Pred. No. 0;

Matches 426; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 503 TLKATQASQTVTLGSGSLVDPGSGNYEDYSWNNPQVFSCLTTLTADDPANIHITDLAADP 562

Db 502 TLKATQASQTVTLGSGSLVDPGSGNYEDYSWNNPQVFSCLTTLTADDPANIHITDLAADP 561

QY 563 LEKNPIHWGQGNWALSQWEDTATKKAATLTWTGTGYNPNPERRGTLVANTLWGSFVDV 622

Db 562 LEKNPIHWGQGNWALSQWEDTATKKAATLTWTGTGYNPNPERRGTLVANTLWGSFVDV 621

QY 623 RSTQOLVATKVRQSOETRGIWCEGISNFFHKDSTKINKGFRHISAGYVVGATTTLASDNL 682

Db 622 RSTQOLVATKVRQSOETRGIWCEGISNFFHKDSTKINKGFRHISAGYVVGATTTLASDNL 681

QY 683 ITAAFCOLFCKDRDHFINKNRASAYAAASLHLQHLATLSSPSLLRLYLPGSESEQPVLFDAQ 742

Db 682 ITAAFCQLFGKRDHFINKNRASAYASLHLQHLATLSPSLLRLPGSESQPVLFDAQ 741
QY 743 ISYISKNTMKTYTQAPKGSSWYNDGCALASSLPHALSHGLFHFAYFPFKIVEAS 802
Db 742 ISYISKNTMKTYTQAPKGSSWYNDGCALASSLPHALSHGLFHFAYFPFKIVEAS 801
QY 803 YHQDSFKERNITLVRSFDSGLINVSPIGTFERFSRNERASYEATVIYVADYVRKNP 862
Db 802 YHQDSFKERNITLVRSFDSGLINVSPIGTFERFSRNERASYEATVIYVADYVRKNP 861
QY 863 DCTALLINNTSKWTTGTNLRSQAGIGRAGIYAFSPNLEVTNLSMEIRGSSRYNADL 922
Db 862 DCTALLINNTSKWTTGTNLRSQAGIGRAGIYAFSPNLEVTNLSMEIRGSSRYNADL 921
QY 923 GKKQF 928
Db 922 GKKQF 927

RESULT 15

US-09-446-677B-16

; Sequence 16, Application US/09446677B

; GENERAL INFORMATION:

; APPLICANT: BIRKELUND, Svend

; CHRISTIANSEN, Gunna

; HEBSGAARD PEDERSEN, Anna-Sofie

; MYGIND, Per

; KNUDSEN, Katrine

; TITLE OF INVENTION: SURFACE EXPOSED PROTEINS FROM CHLAMYDIA

; PNEUMONIAE

; NUMBER OF SEQUENCES: 30

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: BROWDY AND NEIMARK, P.L.L.C.

; STREET: 624 Ninth Street, N.W., Suite 300

; CITY: Washington

; STATE: D.C.

; COUNTRY: USA

; ZIP: 20001

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/446,677B

; FILING DATE: 24-Mar-2000

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: PCT/DK98/00266

; FILING DATE: 19-JUN-1998

; APPLICATION NUMBER: DK 0744/97

; FILING DATE: 23-JUN-1997

; ATTORNEY/AGENT INFORMATION:

; NAME: COOPER, Iver P.

; REGISTRATION NUMBER: 28,005

; REFERENCE/DOCKET NUMBER: BIRKELUND-1

; TELEPHONE: 202-628-5197

; TELEFAX: 202-737-3528

; INFORMATION FOR SEQ ID NO: 16:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 930 amino acids

; TYPE: amino acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: peptide

; SEQUENCE DESCRIPTION: SEQ ID NO: 16:

Query Match 1.7%; Score 16; DB 18; Length 930;
Best Local Similarity 100.0%; Pred. No. 2.2e-05;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 319 GGAIADSGSLSLSA 334
Db 324 GGAIADSGSLSLSA 339

RESULT 16

US-09-857-128-15

; Sequence 15, Application US/09857128

; GENERAL INFORMATION:

; APPLICANT: Aventis Pasteur Limited

; APPLICANT: Mordin et al.

; TITLE OF INVENTION: Chlamydia antigens and corresponding DNA fragments and uses ;

; FILE REFERENCE: 77813-2

; CURRENT APPLICATION NUMBER: US/09/857,128

; CURRENT FILING DATE: 2001-10-29

; PRIOR APPLICATION NUMBER: US 60/110,427

; PRIOR FILING DATE: 1998-12-01

; PRIOR APPLICATION NUMBER: US 60/110,438

; PRIOR FILING DATE: 1998-12-01

; PRIOR APPLICATION NUMBER: US 60/110,339

; PRIOR FILING DATE: 1998-12-01

; PRIOR APPLICATION NUMBER: US 60/110,428

; PRIOR FILING DATE: 1998-12-01

; PRIOR APPLICATION NUMBER: US 60/110,340

; PRIOR FILING DATE: 1998-12-01

; NUMBER OF SEQ ID NOS: 27

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 15

; LENGTH: 930

; TYPE: PRT

; ORGANISM: Chlamydia pneumoniae

US-09-857-128-15

Query Match 1.7%; Score 16; DB 23; Length 930;
Best Local Similarity 100.0%; Pred. No. 2.2e-05;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 319 GGAIADSGSLSLSA 334
Db 324 GGAIADSGSLSLSA 339

RESULT 17

US-10-282-122A-54680

; Sequence 54680, Application US/10282122A

; GENERAL INFORMATION:

; APPLICANT: Wang, Liangsu

; APPLICANT: Zamudio, Carlos

; APPLICANT: Malone, Cheryl

; APPLICANT: Haselbeck, Robert

; APPLICANT: Ohlsen, Kari

; APPLICANT: Zyskind, Judith

; APPLICANT: Wall, Daniel

; APPLICANT: Trawick, John

; APPLICANT: Carr, Grant

; APPLICANT: Yamamoto, Robert

; APPLICANT: Forsyth, R.

; APPLICANT: Xu, H.

; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms

; FILE REFERENCE: ELITRA.034A

; CURRENT APPLICATION NUMBER: US/10/282,122A

; CURRENT FILING DATE: 2003-02-20

; PRIOR APPLICATION NUMBER: 60/191,078

; PRIOR FILING DATE: 2000-03-21

; PRIOR APPLICATION NUMBER: 60/206,848

; PRIOR FILING DATE: 2000-05-23

; PRIOR APPLICATION NUMBER: 60/207,727

; PRIOR FILING DATE: 2000-05-26

; PRIOR APPLICATION NUMBER: 60/230,335

; PRIOR FILING DATE: 2000-09-06

; PRIOR APPLICATION NUMBER: 60/230,347

; PRIOR FILING DATE: 2000-09-09

; PRIOR APPLICATION NUMBER: 60/242,578

; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16

; Remaining Prior Application data removed - See File Wrapper or PALM.

; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1

; SEQ ID NO 54680

; LENGTH: 930

; TYPE: PRT

; ORGANISM: Chlamydia pneumoniae

US-10-282-122A-54680

Query Match 1.7% Score 16; DB 28; Length 930;

Best Local Similarity 100.0%; Pred. No. 2.2e-05;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 319 GGAIAIADSGSLSLSA 334

|||||

Db 324 GGAIAIADSGSLSLSA 339

RESULT 18

US-10-289-762-470

; Sequence 470, Application US/10289762

; GENERAL INFORMATION:

; APPLICANT: Griflais, R.

; TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragments

; TITLE OF INVENTION: thereof and uses thereof, in particular for the diagnosis, prevention

; TITLE OF INVENTION: and treatment of infection

; FILE REFERENCE: 9710-003-999

; CURRENT APPLICATION NUMBER: US/10/289,762

; CURRENT FILING DATE: 2003-03-27

; NUMBER OF SEQ ID NOS: 5849

; SEQ ID NO 470

; LENGTH: 930

; TYPE: PRT

; ORGANISM: Chlamydia pneumoniae

US-10-289-762-470

Query Match 1.7% Score 16; DB 28; Length 930;

Best Local Similarity 100.0%; Pred. No. 2.2e-05;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 319 GGAIAIADSGSLSLSA 334

|||||

Db 324 GGAIAIADSGSLSLSA 339

RESULT 19

US-10-312-273-45

; Sequence 45, Application US/10312273

; GENERAL INFORMATION:

; APPLICANT: Chiron SpA

; TITLE OF INVENTION: IMMUNISATION AGAINST CHLAMYDIA PNEUMONIAE

; FILE REFERENCE: P025035WO

; CURRENT APPLICATION NUMBER: US/10/312,273

; CURRENT FILING DATE: 2002-12-20

; PRIOR APPLICATION NUMBER: 0016363.4

; PRIOR FILING DATE: 2000-07-03

; PRIOR APPLICATION NUMBER: 0017047.2

; PRIOR FILING DATE: 2000-07-11

; PRIOR APPLICATION NUMBER: 0017983.8

; PRIOR FILING DATE: 2000-07-21

; PRIOR APPLICATION NUMBER: 0019368.0

; PRIOR FILING DATE: 2000-08-07

; PRIOR APPLICATION NUMBER: 0020440.4

; PRIOR FILING DATE: 2000-08-18

; PRIOR APPLICATION NUMBER: 0022583.9
; PRIOR FILING DATE: 2000-09-14
; PRIOR APPLICATION NUMBER: 0027549.5
; PRIOR FILING DATE: 2000-11-10
; PRIOR APPLICATION NUMBER: 0031706.5
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 664
; SOFTWARE: SeqWin99, version 1.02

; SEQ ID NO 45

; LENGTH: 930

; TYPE: PRT

; ORGANISM: Chlamydia pneumoniae

US-10-312-273-45

Query Match 1.7% Score 16; DB 29; Length 930;

Best Local Similarity 100.0%; Pred. No. 2.2e-05;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 319 GGAIAIADSGSLSLSA 334

|||||

Db 324 GGAIAIADSGSLSLSA 339

RESULT 20

US-10-312-273-45

; Sequence 45, Application US/10312273

; GENERAL INFORMATION:

; APPLICANT: Chiron SpA

; TITLE OF INVENTION: IMMUNISATION AGAINST CHLAMYDIA PNEUMONIAE

; FILE REFERENCE: P025035WO

; CURRENT APPLICATION NUMBER: US/10/312,273

; CURRENT FILING DATE: 2002-12-20

; PRIOR APPLICATION NUMBER: 0016363.4

; PRIOR FILING DATE: 2000-07-03

; PRIOR APPLICATION NUMBER: 0017047.2

; PRIOR FILING DATE: 2000-07-11

; PRIOR APPLICATION NUMBER: 0017983.8

; PRIOR FILING DATE: 2000-07-21

; PRIOR APPLICATION NUMBER: 0019368.0

; PRIOR FILING DATE: 2000-08-07

; PRIOR APPLICATION NUMBER: 0020440.4

; PRIOR FILING DATE: 2000-08-18

; PRIOR APPLICATION NUMBER: 0022583.9

; PRIOR FILING DATE: 2000-09-14

; PRIOR APPLICATION NUMBER: 0027549.5

; PRIOR FILING DATE: 2000-11-10

; PRIOR APPLICATION NUMBER: 0031706.5

; PRIOR FILING DATE: 2000-12-22

; NUMBER OF SEQ ID NOS: 664

; SOFTWARE: SeqWin99, version 1.02

; SEQ ID NO 45

; LENGTH: 930

; TYPE: PRT

; ORGANISM: Chlamydia pneumoniae

US-10-312-273-45

Query Match 1.7% Score 16; DB 29; Length 930;

Best Local Similarity 100.0%; Pred. No. 2.2e-05;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 319 GGAIAIADSGSLSLSA 334

|||||

Db 324 GGAIAIADSGSLSLSA 339

RESULT 21

US-10-312-273-45

; Sequence 45, Application US/10312273

; GENERAL INFORMATION:

; APPLICANT: Chiron SpA

; TITLE OF INVENTION: IMMUNISATION AGAINST CHLAMYDIA PNEUMONIAE

; FILE REFERENCE: P025035WO

; CURRENT APPLICATION NUMBER: US/10/312,273


```
/ CURRENT FILING DATE: 2002-12-20
/ PRIOR APPLICATION NUMBER: 0016363.4
/ PRIOR FILING DATE: 2000-07-03
/ PRIOR APPLICATION NUMBER: 0017047.2
/ PRIOR FILING DATE: 2000-07-11
/ PRIOR APPLICATION NUMBER: 0017983.8
/ PRIOR FILING DATE: 2000-07-21
/ PRIOR APPLICATION NUMBER: 0019368.0
/ PRIOR FILING DATE: 2000-08-07
/ PRIOR APPLICATION NUMBER: 0020440.4
/ PRIOR FILING DATE: 2000-08-18
/ PRIOR APPLICATION NUMBER: 0022583.9
/ PRIOR FILING DATE: 2000-09-14
/ PRIOR APPLICATION NUMBER: 0027549.5
/ PRIOR FILING DATE: 2000-11-10
/ PRIOR APPLICATION NUMBER: 0031706.5
/ PRIOR FILING DATE: 2000-12-22
/ NUMBER OF SEQ ID NOS: 664
/ SOFTWARE: SeqWin99, version 1.02
/ SEQ ID NO 45
/ LENGTH: 930
/ TYPE: PRT
/ ORGANISM: Chlamydia pneumoniae
US-10-312-273-45
```

```
Query Match 1.7%; Score 16; DB 29; Length 930;
Best Local Similarity 100.0%; Pred. No. 2.2e-05;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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```
QY 319 GGAIAIADSGSLSLA 334
|||||
DB 324 GGAIAIADSGSLSLA 339
```

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RESULT 22
US-10-312-273-45
/ Sequence 45, Application US/10312273
/ GENERAL INFORMATION:
/ APPLICANT: CHIRON SPA
/ TITLE OF INVENTION: IMMUNISATION AGAINST CHLAMYDIA PNEUMONIAE
/ FILE REFERENCE: P025035WO
/ CURRENT APPLICATION NUMBER: US/10/312,273
/ CURRENT FILING DATE: 2002-12-20
/ PRIOR APPLICATION NUMBER: 0016363.4
/ PRIOR FILING DATE: 2000-07-03
/ PRIOR APPLICATION NUMBER: 0017047.2
/ PRIOR FILING DATE: 2000-07-11
/ PRIOR APPLICATION NUMBER: 0017983.8
/ PRIOR FILING DATE: 2000-07-21
/ PRIOR APPLICATION NUMBER: 0019368.0
/ PRIOR FILING DATE: 2000-08-07
/ PRIOR APPLICATION NUMBER: 0020440.4
/ PRIOR FILING DATE: 2000-08-18
/ PRIOR APPLICATION NUMBER: 0022583.9
/ PRIOR FILING DATE: 2000-09-14
/ PRIOR APPLICATION NUMBER: 0027549.5
/ PRIOR FILING DATE: 2000-11-10
/ PRIOR APPLICATION NUMBER: 0031706.5
/ PRIOR FILING DATE: 2000-12-22
/ NUMBER OF SEQ ID NOS: 664
/ SOFTWARE: SeqWin99, version 1.02
/ SEQ ID NO 45
/ LENGTH: 930
/ TYPE: PRT
/ ORGANISM: Chlamydia pneumoniae
US-10-312-273-45
```

```
Query Match 1.7%; Score 16; DB 29; Length 930;
Best Local Similarity 100.0%; Pred. No. 2.2e-05;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 319 GGAIAIADSGSLSLA 334
|||||
```

```
DB 324 GGAIAIADSGSLSLA 339
RESULT 23
US-10-312-273-45
/ Sequence 45, Application US/10312273
/ GENERAL INFORMATION:
/ APPLICANT: CHIRON SPA
/ TITLE OF INVENTION: IMMUNISATION AGAINST CHLAMYDIA PNEUMONIAE
/ FILE REFERENCE: P025035WO
/ CURRENT APPLICATION NUMBER: US/10/312,273
/ CURRENT FILING DATE: 2002-12-20
/ PRIOR APPLICATION NUMBER: 0016363.4
/ PRIOR FILING DATE: 2000-07-03
/ PRIOR APPLICATION NUMBER: 0017047.2
/ PRIOR FILING DATE: 2000-07-11
/ PRIOR APPLICATION NUMBER: 0017983.8
/ PRIOR FILING DATE: 2000-07-21
/ PRIOR APPLICATION NUMBER: 0019368.0
/ PRIOR FILING DATE: 2000-08-07
/ PRIOR APPLICATION NUMBER: 0020440.4
/ PRIOR FILING DATE: 2000-08-18
/ PRIOR APPLICATION NUMBER: 0022583.9
/ PRIOR FILING DATE: 2000-09-14
/ PRIOR APPLICATION NUMBER: 0027549.5
/ PRIOR FILING DATE: 2000-11-10
/ PRIOR APPLICATION NUMBER: 0031706.5
/ PRIOR FILING DATE: 2000-12-22
/ NUMBER OF SEQ ID NOS: 664
/ SOFTWARE: SeqWin99, version 1.02
/ SEQ ID NO 45
/ LENGTH: 930
/ TYPE: PRT
/ ORGANISM: Chlamydia pneumoniae
US-10-312-273-45
```

```
Query Match 1.7%; Score 16; DB 29; Length 930;
Best Local Similarity 100.0%; Pred. No. 2.2e-05;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 319 GGAIAIADSGSLSLA 334
|||||
DB 324 GGAIAIADSGSLSLA 339
```

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RESULT 24
US-10-312-273-45
/ Sequence 45, Application US/10312273
/ GENERAL INFORMATION:
/ APPLICANT: CHIRON SPA
/ TITLE OF INVENTION: IMMUNISATION AGAINST CHLAMYDIA PNEUMONIAE
/ FILE REFERENCE: P025035WO
/ CURRENT APPLICATION NUMBER: US/10/312,273
/ CURRENT FILING DATE: 2002-12-20
/ PRIOR APPLICATION NUMBER: 0016363.4
/ PRIOR FILING DATE: 2000-07-03
/ PRIOR APPLICATION NUMBER: 0017047.2
/ PRIOR FILING DATE: 2000-07-11
/ PRIOR APPLICATION NUMBER: 0017983.8
/ PRIOR FILING DATE: 2000-07-21
/ PRIOR APPLICATION NUMBER: 0019368.0
/ PRIOR FILING DATE: 2000-08-07
/ PRIOR APPLICATION NUMBER: 0020440.4
/ PRIOR FILING DATE: 2000-08-18
/ PRIOR APPLICATION NUMBER: 0022583.9
/ PRIOR FILING DATE: 2000-09-14
/ PRIOR APPLICATION NUMBER: 0027549.5
/ PRIOR FILING DATE: 2000-11-10
/ PRIOR APPLICATION NUMBER: 0031706.5
/ PRIOR FILING DATE: 2000-12-22
/ NUMBER OF SEQ ID NOS: 664
/ SOFTWARE: SeqWin99, version 1.02
/ SEQ ID NO 45
```

; LENGTH: 930
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-10-312-273-45

Query Match 1.7%; Score 16; DB 29; Length 930;
Best Local Similarity 100.0%; Pred. No. 2.2e-05;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 319 GGAIATADSGSLSLA 334
|||||
Db 324 GGAIATADSGSLSLA 339

RESULT 25
US-10-312-273-45
; Sequence 45, Application US/10312273
; GENERAL INFORMATION:
; APPLICANT: CHIRON SpA
; TITLE OF INVENTION: IMMUNISATION AGAINST CHLAMYDIA PNEUMONIAE
; FILE REFERENCE: P025035W0
; CURRENT APPLICATION NUMBER: US/10/312,273
; CURRENT FILING DATE: 2002-12-20
; PRIOR APPLICATION NUMBER: 0016363.4
; PRIOR FILING DATE: 2000-07-03
; PRIOR APPLICATION NUMBER: 0017047.2
; PRIOR FILING DATE: 2000-07-11
; PRIOR APPLICATION NUMBER: 0017983.8
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: 0019368.0
; PRIOR FILING DATE: 2000-08-07
; PRIOR APPLICATION NUMBER: 0020440.4
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: 0022583.9
; PRIOR FILING DATE: 2000-09-14
; PRIOR APPLICATION NUMBER: 0027549.5
; PRIOR FILING DATE: 2000-11-10
; PRIOR APPLICATION NUMBER: 0031706.5
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 664
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 45
; LENGTH: 930
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-10-312-273-45

Query Match 1.7%; Score 16; DB 29; Length 930;
Best Local Similarity 100.0%; Pred. No. 2.2e-05;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 319 GGAIATADSGSLSLA 334
|||||
Db 324 GGAIATADSGSLSLA 339

RESULT 26
US-10-312-273-45
; Sequence 45, Application US/10312273
; GENERAL INFORMATION:
; APPLICANT: CHIRON SpA
; TITLE OF INVENTION: IMMUNISATION AGAINST CHLAMYDIA PNEUMONIAE
; FILE REFERENCE: P025035W0
; CURRENT APPLICATION NUMBER: US/10/312,273
; CURRENT FILING DATE: 2002-12-20
; PRIOR APPLICATION NUMBER: 0016363.4
; PRIOR FILING DATE: 2000-07-03
; PRIOR APPLICATION NUMBER: 0017047.2
; PRIOR FILING DATE: 2000-07-11
; PRIOR APPLICATION NUMBER: 0017983.8
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: 0019368.0
; PRIOR FILING DATE: 2000-08-07

; PRIOR APPLICATION NUMBER: 0020440.4
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: 0022583.9
; PRIOR FILING DATE: 2000-09-14
; PRIOR APPLICATION NUMBER: 0027549.5
; PRIOR FILING DATE: 2000-11-10
; PRIOR APPLICATION NUMBER: 0031706.5
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 664
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 45
; LENGTH: 930
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-10-312-273-45

Query Match 1.7%; Score 16; DB 29; Length 930;
Best Local Similarity 100.0%; Pred. No. 2.2e-05;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 319 GGAIATADSGSLSLA 334
|||||
Db 324 GGAIATADSGSLSLA 339

RESULT 27
US-10-312-273-45
; Sequence 45, Application US/10312273
; GENERAL INFORMATION:
; APPLICANT: CHIRON SpA
; TITLE OF INVENTION: IMMUNISATION AGAINST CHLAMYDIA PNEUMONIAE
; FILE REFERENCE: P025035W0
; CURRENT APPLICATION NUMBER: US/10/312,273
; CURRENT FILING DATE: 2002-12-20
; PRIOR APPLICATION NUMBER: 0016363.4
; PRIOR FILING DATE: 2000-07-03
; PRIOR APPLICATION NUMBER: 0017047.2
; PRIOR FILING DATE: 2000-07-11
; PRIOR APPLICATION NUMBER: 0017983.8
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: 0019368.0
; PRIOR FILING DATE: 2000-08-07
; PRIOR APPLICATION NUMBER: 0020440.4
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: 0022583.9
; PRIOR FILING DATE: 2000-09-14
; PRIOR APPLICATION NUMBER: 0027549.5
; PRIOR FILING DATE: 2000-11-10
; PRIOR APPLICATION NUMBER: 0031706.5
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 664
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 45
; LENGTH: 930
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-10-312-273-45

Query Match 1.7%; Score 16; DB 29; Length 930;
Best Local Similarity 100.0%; Pred. No. 2.2e-05;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 319 GGAIATADSGSLSLA 334
|||||
Db 324 GGAIATADSGSLSLA 339

RESULT 28
US-09-438-185-448
; Sequence 448, Application US/09438185
; GENERAL INFORMATION:
; APPLICANT: Stephens, Richard
; APPLICANT: Mitchell, Wayne

APPLICANT: Kalman, Sue
APPLICANT: Davis, Ronald
TITLE OF INVENTION: The Regents of the University of California
FILE REFERENCE: 018941-000411US
CURRENT APPLICATION NUMBER: US/09/438,185
CURRENT FILING DATE: 1999-11-11
PRIOR APPLICATION NUMBER: US 60/108,279
PRIOR FILING DATE: 1998-11-12
PRIOR APPLICATION NUMBER: US 60/128,606
PRIOR FILING DATE: 1999-04-08
NUMBER OF SEQ ID NOS: 1074
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 448
LENGTH: 938
TYPE: PRT
ORGANISM: Chlamydia pneumoniae
US-09-438-185-448

Query Match 1.7%; Score 16; DB 18; Length 938;
Best Local Similarity 100.0%; Pred. No. 2.3e-05;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 319 GGAIAIADSGSLSLSA 334
|||||
Db 332 GGAIAIADSGSLSLSA 347

RESULT 29

US-09-438-185A-448
Sequence 448, Application US/09438185A

GENERAL INFORMATION:
APPLICANT: Stephens, Richard
APPLICANT: Mitchell, Wayne
APPLICANT: Kalman, Sue
APPLICANT: Davis, Ronald
TITLE OF INVENTION: The Regents of the University of California
FILE REFERENCE: 018941-000411US
CURRENT APPLICATION NUMBER: US/09/438,185A
CURRENT FILING DATE: 2002-03-13
PRIOR APPLICATION NUMBER: US 60/108,279
PRIOR FILING DATE: 1998-11-12
PRIOR APPLICATION NUMBER: US 60/128,606
PRIOR FILING DATE: 1999-04-08
NUMBER OF SEQ ID NOS: 1074
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 448
LENGTH: 938
TYPE: PRT
FEATURE:
OTHER INFORMATION: CPn0446
US-09-438-185A-448

Query Match 1.7%; Score 16; DB 18; Length 938;
Best Local Similarity 100.0%; Pred. No. 2.3e-05;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 319 GGAIAIADSGSLSLSA 334
|||||
Db 332 GGAIAIADSGSLSLSA 347

RESULT 30

US-09-857-128-22
Sequence 22, Application US/09857128

GENERAL INFORMATION:
APPLICANT: Aventis Pasteur Limited
APPLICANT: Mordin et al.
TITLE OF INVENTION: Chlamydia antigens and corresponding DNA fragments and uses there
FILE REFERENCE: 77813-2
CURRENT APPLICATION NUMBER: US/09/857,128

CURRENT FILING DATE: 2001-10-29
PRIOR APPLICATION NUMBER: US 60/110,427
PRIOR FILING DATE: 1998-12-01
PRIOR APPLICATION NUMBER: US 60/110,438
PRIOR FILING DATE: 1998-12-01
PRIOR APPLICATION NUMBER: US 60/110,339
PRIOR FILING DATE: 1998-12-01
PRIOR APPLICATION NUMBER: US 60/110,428
PRIOR FILING DATE: 1998-12-01
PRIOR APPLICATION NUMBER: US 60/110,340
PRIOR FILING DATE: 1998-12-01
NUMBER OF SEQ ID NOS: 27
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 22
LENGTH: 14
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: B-cell epitope
US-09-857-128-22

Query Match 1.5%; Score 14; DB 23; Length 14;
Best Local Similarity 100.0%; Pred. No. 3.6e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 595 WTKGTGYNPNPERRG 608
|||||
Db 1 WTKGTGYNPNPERRG 14

RESULT 31

US-10-312-273-15
Sequence 15, Application US/10312273
GENERAL INFORMATION:
APPLICANT: CHIRON Spa
TITLE OF INVENTION: IMMUNISATION AGAINST CHLAMYDIA PNEUMONIAE
FILE REFERENCE: P025035WO
CURRENT APPLICATION NUMBER: US/10/312,273
CURRENT FILING DATE: 2002-12-20
PRIOR APPLICATION NUMBER: 0016363.4
PRIOR FILING DATE: 2000-07-03
PRIOR APPLICATION NUMBER: 0017047.2
PRIOR FILING DATE: 2000-07-11
PRIOR APPLICATION NUMBER: 0017983.8
PRIOR FILING DATE: 2000-07-21
PRIOR APPLICATION NUMBER: 0019368.0
PRIOR FILING DATE: 2000-08-07
PRIOR APPLICATION NUMBER: 0020440.4
PRIOR FILING DATE: 2000-08-18
PRIOR APPLICATION NUMBER: 0022583.9
PRIOR FILING DATE: 2000-09-14
PRIOR APPLICATION NUMBER: 0027549.5
PRIOR FILING DATE: 2000-11-10
PRIOR APPLICATION NUMBER: 0031706.5
PRIOR FILING DATE: 2000-12-22
NUMBER OF SEQ ID NOS: 664
SOFTWARE: SeqWin99, version 1.02
SEQ ID NO 15
LENGTH: 354
TYPE: PRT
ORGANISM: Chlamydia pneumoniae
US-10-312-273-15

Query Match 1.3%; Score 12; DB 29; Length 354;
Best Local Similarity 100.0%; Pred. No. 0.073;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 615 LWGSEFVDVRSIQ 626
|||||
Db 46 LWGSEFVDVRSIQ 57

RESULT 32

```
US-10-312-273-15
; Sequence 15, Application US/10312273
; GENERAL INFORMATION:
; APPLICANT: CHIRON Spa
; TITLE OF INVENTION: IMMUNISATION AGAINST CHLAMYDIA PNEUMONIAE
; FILE REFERENCE: P025035WO
; CURRENT APPLICATION NUMBER: US/10/312,273
; CURRENT FILING DATE: 2002-12-20
; PRIOR APPLICATION NUMBER: 0016363.4
; PRIOR FILING DATE: 2000-07-03
; PRIOR APPLICATION NUMBER: 0017047.2
; PRIOR FILING DATE: 2000-07-11
; PRIOR APPLICATION NUMBER: 0017983.8
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: 0019368.0
; PRIOR FILING DATE: 2000-08-07
; PRIOR APPLICATION NUMBER: 0020440.4
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: 0022583.9
; PRIOR FILING DATE: 2000-09-14
; PRIOR APPLICATION NUMBER: 0027549.5
; PRIOR FILING DATE: 2000-11-10
; PRIOR APPLICATION NUMBER: 0031706.5
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 664
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 15
; LENGTH: 354
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-10-312-273-15

Query Match          1.3%; Score 12; DB 29; Length 354;
Best Local Similarity 100.0%; Pred. No. 0.073;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      615  LMGSFVDVRSIQ 626
Db      46   LMGSFVDVRSIQ 57
          |||||

RESULT 33
US-10-312-273-15
; Sequence 15, Application US/10312273
; GENERAL INFORMATION:
; APPLICANT: CHIRON Spa
; TITLE OF INVENTION: IMMUNISATION AGAINST CHLAMYDIA PNEUMONIAE
; FILE REFERENCE: P025035WO
; CURRENT APPLICATION NUMBER: US/10/312,273
; CURRENT FILING DATE: 2002-12-20
; PRIOR APPLICATION NUMBER: 0016363.4
; PRIOR FILING DATE: 2000-07-03
; PRIOR APPLICATION NUMBER: 0017047.2
; PRIOR FILING DATE: 2000-07-11
; PRIOR APPLICATION NUMBER: 0017983.8
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: 0019368.0
; PRIOR FILING DATE: 2000-08-07
; PRIOR APPLICATION NUMBER: 0020440.4
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: 0022583.9
; PRIOR FILING DATE: 2000-09-14
; PRIOR APPLICATION NUMBER: 0027549.5
; PRIOR FILING DATE: 2000-11-10
; PRIOR APPLICATION NUMBER: 0031706.5
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 664
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 15
; LENGTH: 354
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-10-312-273-15
```

```
Query Match          1.3%; Score 12; DB 29; Length 354;
Best Local Similarity 100.0%; Pred. No. 0.073;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      615  LMGSFVDVRSIQ 626
Db      46   LMGSFVDVRSIQ 57
          |||||

RESULT 34
US-10-312-273-15
; Sequence 15, Application US/10312273
; GENERAL INFORMATION:
; APPLICANT: CHIRON Spa
; TITLE OF INVENTION: IMMUNISATION AGAINST CHLAMYDIA PNEUMONIAE
; FILE REFERENCE: P025035WO
; CURRENT APPLICATION NUMBER: US/10/312,273
; CURRENT FILING DATE: 2002-12-20
; PRIOR APPLICATION NUMBER: 0016363.4
; PRIOR FILING DATE: 2000-07-03
; PRIOR APPLICATION NUMBER: 0017047.2
; PRIOR FILING DATE: 2000-07-11
; PRIOR APPLICATION NUMBER: 0017983.8
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: 0019368.0
; PRIOR FILING DATE: 2000-08-07
; PRIOR APPLICATION NUMBER: 0020440.4
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: 0022583.9
; PRIOR FILING DATE: 2000-09-14
; PRIOR APPLICATION NUMBER: 0027549.5
; PRIOR FILING DATE: 2000-11-10
; PRIOR APPLICATION NUMBER: 0031706.5
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 664
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 15
; LENGTH: 354
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-10-312-273-15

Query Match          1.3%; Score 12; DB 29; Length 354;
Best Local Similarity 100.0%; Pred. No. 0.073;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      615  LMGSFVDVRSIQ 626
Db      46   LMGSFVDVRSIQ 57
          |||||

RESULT 35
US-10-312-273-15
; Sequence 15, Application US/10312273
; GENERAL INFORMATION:
; APPLICANT: CHIRON Spa
; TITLE OF INVENTION: IMMUNISATION AGAINST CHLAMYDIA PNEUMONIAE
; FILE REFERENCE: P025035WO
; CURRENT APPLICATION NUMBER: US/10/312,273
; CURRENT FILING DATE: 2002-12-20
; PRIOR APPLICATION NUMBER: 0016363.4
; PRIOR FILING DATE: 2000-07-03
; PRIOR APPLICATION NUMBER: 0017047.2
; PRIOR FILING DATE: 2000-07-11
; PRIOR APPLICATION NUMBER: 0017983.8
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: 0019368.0
; PRIOR FILING DATE: 2000-08-07
; PRIOR APPLICATION NUMBER: 0020440.4
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: 0022583.9
; PRIOR FILING DATE: 2000-09-14
```

; PRIOR APPLICATION NUMBER: 0027549.5
; PRIOR FILING DATE: 2000-11-10
; PRIOR APPLICATION NUMBER: 0031706.5
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 664
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 15
; LENGTH: 354
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-10-312-273-15

Query Match 1.3%; Score 12; DB 29; Length 354;
Best Local Similarity 100.0%; Pred. No. 0.073;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 615 LMGSFVDVRSIQ 626
|||||
Db 46 LMGSFVDVRSIQ 57

RESULT 36
US-10-312-273-15
; Sequence 15, Application US/10312273
; GENERAL INFORMATION:
; APPLICANT: CHIRON Spa
; TITLE OF INVENTION: IMMUNISATION AGAINST CHLAMYDIA PNEUMONIAE
; FILE REFERENCE: P025035WO
; CURRENT APPLICATION NUMBER: US/10/312,273
; CURRENT FILING DATE: 2002-12-20
; PRIOR APPLICATION NUMBER: 0016363.4
; PRIOR FILING DATE: 2000-07-03
; PRIOR APPLICATION NUMBER: 0017047.2
; PRIOR FILING DATE: 2000-07-11
; PRIOR APPLICATION NUMBER: 0017983.8
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: 0019368.0
; PRIOR FILING DATE: 2000-08-07
; PRIOR APPLICATION NUMBER: 0020440.4
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: 0022583.9
; PRIOR FILING DATE: 2000-09-14
; PRIOR APPLICATION NUMBER: 0027549.5
; PRIOR FILING DATE: 2000-11-10
; PRIOR APPLICATION NUMBER: 0031706.5
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 664
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 15
; LENGTH: 354
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-10-312-273-15

Query Match 1.3%; Score 12; DB 29; Length 354;
Best Local Similarity 100.0%; Pred. No. 0.073;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 615 LMGSFVDVRSIQ 626
|||||
Db 46 LMGSFVDVRSIQ 57

RESULT 37
US-10-312-273-15
; Sequence 15, Application US/10312273
; GENERAL INFORMATION:
; APPLICANT: CHIRON Spa
; TITLE OF INVENTION: IMMUNISATION AGAINST CHLAMYDIA PNEUMONIAE
; FILE REFERENCE: P025035WO
; CURRENT APPLICATION NUMBER: US/10/312,273
; CURRENT FILING DATE: 2002-12-20
; PRIOR APPLICATION NUMBER: 0016363.4

; PRIOR FILING DATE: 2000-07-03
; PRIOR APPLICATION NUMBER: 0017047.2
; PRIOR FILING DATE: 2000-07-11
; PRIOR APPLICATION NUMBER: 0017983.8
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: 0019368.0
; PRIOR FILING DATE: 2000-08-07
; PRIOR APPLICATION NUMBER: 0020440.4
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: 0022583.9
; PRIOR FILING DATE: 2000-09-14
; PRIOR APPLICATION NUMBER: 0027549.5
; PRIOR FILING DATE: 2000-11-10
; PRIOR APPLICATION NUMBER: 0031706.5
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 664
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 15
; LENGTH: 354
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-10-312-273-15

Query Match 1.3%; Score 12; DB 29; Length 354;
Best Local Similarity 100.0%; Pred. No. 0.073;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 615 LMGSFVDVRSIQ 626
|||||
Db 46 LMGSFVDVRSIQ 57

RESULT 38
US-10-312-273-15
; Sequence 15, Application US/10312273
; GENERAL INFORMATION:
; APPLICANT: CHIRON Spa
; TITLE OF INVENTION: IMMUNISATION AGAINST CHLAMYDIA PNEUMONIAE
; FILE REFERENCE: P025035WO
; CURRENT APPLICATION NUMBER: US/10/312,273
; CURRENT FILING DATE: 2002-12-20
; PRIOR APPLICATION NUMBER: 0016363.4
; PRIOR FILING DATE: 2000-07-03
; PRIOR APPLICATION NUMBER: 0017047.2
; PRIOR FILING DATE: 2000-07-11
; PRIOR APPLICATION NUMBER: 0017983.8
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: 0019368.0
; PRIOR FILING DATE: 2000-08-07
; PRIOR APPLICATION NUMBER: 0020440.4
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: 0022583.9
; PRIOR FILING DATE: 2000-09-14
; PRIOR APPLICATION NUMBER: 0027549.5
; PRIOR FILING DATE: 2000-11-10
; PRIOR APPLICATION NUMBER: 0031706.5
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 664
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 15
; LENGTH: 354
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-10-312-273-15

Query Match 1.3%; Score 12; DB 29; Length 354;
Best Local Similarity 100.0%; Pred. No. 0.073;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 615 LMGSFVDVRSIQ 626
|||||
Db 46 LMGSFVDVRSIQ 57

```
RESULT 39
US-10-312-273-15
; Sequence 15, Application US/10312273
; GENERAL INFORMATION:
; APPLICANT: CHIRON Spa
; TITLE OF INVENTION: IMMUNISATION AGAINST CHLAMYDIA PNEUMONIAE
; FILE REFERENCE: P025035W0
; CURRENT APPLICATION NUMBER: US/10/312,273
; CURRENT FILING DATE: 2002-12-20
; PRIOR APPLICATION NUMBER: 0016363.4
; PRIOR FILING DATE: 2000-07-03
; PRIOR APPLICATION NUMBER: 0017047.2
; PRIOR FILING DATE: 2000-07-11
; PRIOR APPLICATION NUMBER: 0017983.8
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: 0019368.0
; PRIOR FILING DATE: 2000-08-07
; PRIOR APPLICATION NUMBER: 0020440.4
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: 0022583.9
; PRIOR FILING DATE: 2000-09-14
; PRIOR APPLICATION NUMBER: 0027549.5
; PRIOR FILING DATE: 2000-11-10
; PRIOR APPLICATION NUMBER: 0031706.5
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 664
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 15
; LENGTH: 354
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-10-312-273-15

Query Match          1.3%; Score 12; DB 29; Length 354;
Best Local Similarity 100.0%; Pred. No. 0.073;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      615 LMGSFVDVRSIQ 626
Db      46 LMGSFVDVRSIQ 57

RESULT 40
US-09-438-185-19
; Sequence 19, Application US/09438185
; GENERAL INFORMATION:
; APPLICANT: Stephens, Richard
; APPLICANT: Mitchell, Wayne
; APPLICANT: Kalman, Sue
; APPLICANT: Davis, Ronald
; APPLICANT: The Regents of the University of California
; TITLE OF INVENTION: Chlamydia pneumoniae genome sequence
; FILE REFERENCE: 018941-000411US
; CURRENT APPLICATION NUMBER: US/09/438,185
; CURRENT FILING DATE: 1999-11-11
; PRIOR APPLICATION NUMBER: US 60/108,279
; PRIOR FILING DATE: 1998-11-12
; PRIOR APPLICATION NUMBER: US 60/128,606
; PRIOR FILING DATE: 1999-04-08
; NUMBER OF SEQ ID NOS: 1074
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 19
; LENGTH: 359
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-09-438-185-19

Query Match          1.3%; Score 12; DB 18; Length 359;
Best Local Similarity 100.0%; Pred. No. 0.074;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      615 LMGSFVDVRSIQ 626
Db      46 LMGSFVDVRSIQ 57

RESULT 41
US-09-438-185A-19
; Sequence 19, Application US/09438185A
; GENERAL INFORMATION:
; APPLICANT: Stephens, Richard
; APPLICANT: Mitchell, Wayne
; APPLICANT: Kalman, Sue
; APPLICANT: Davis, Ronald
; APPLICANT: The Regents of the University of California
; TITLE OF INVENTION: Chlamydia pneumoniae Genome Sequence
; FILE REFERENCE: 018941-000411US
; CURRENT APPLICATION NUMBER: US/09/438,185A
; CURRENT FILING DATE: 2002-03-13
; PRIOR APPLICATION NUMBER: US 60/108,279
; PRIOR FILING DATE: 1998-11-12
; PRIOR APPLICATION NUMBER: US 60/128,606
; PRIOR FILING DATE: 1999-04-08
; NUMBER OF SEQ ID NOS: 1074
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 19
; LENGTH: 359
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
; FEATURE:
; OTHER INFORMATION: Cpn0017
US-09-438-185A-19

Query Match          1.3%; Score 12; DB 18; Length 359;
Best Local Similarity 100.0%; Pred. No. 0.074;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      615 LMGSFVDVRSIQ 626
Db      51 LMGSFVDVRSIQ 62

RESULT 42
US-10-289-762-32
; Sequence 32, Application US/10289762
; GENERAL INFORMATION:
; APPLICANT: Griflais, R.
; TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragm
; TITLE OF INVENTION: thereof and uses thereof, in particular for the diagnosis, p
; TITLE OF INVENTION: and treatment of infection
; FILE REFERENCE: 9710-003-999
; CURRENT APPLICATION NUMBER: US/10/289,762
; CURRENT FILING DATE: 2003-03-27
; NUMBER OF SEQ ID NOS: 6849
; SEQ ID NO 32
; LENGTH: 507
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-10-289-762-32

Query Match          1.3%; Score 12; DB 28; Length 507;
Best Local Similarity 100.0%; Pred. No. 0.1;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      615 LMGSFVDVRSIQ 626
Db      199 LMGSFVDVRSIQ 210

RESULT 43
US-09-376-770-16
; Sequence 16, Application US/09376770
; GENERAL INFORMATION:
; APPLICANT: Murglin, Andrew
; TITLE OF INVENTION: CHLAMYDIA ANTIGENS AND CORRESPONDING DNA FRAGMENTS
```

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Db      51 LMGSFVDVRSIQ 62
```

; TITLE OF INVENTION: THEREOF
; FILE REFERENCE: 19721-006
; CURRENT APPLICATION NUMBER: US/09/376,770
; CURRENT FILING DATE: 1998-08-17
; EARLIER APPLICATION NUMBER: 60/097,187
; EARLIER FILING DATE: 1998-08-20
; EARLIER APPLICATION NUMBER: 60/097,188
; EARLIER FILING DATE: 1998-08-20
; EARLIER APPLICATION NUMBER: 60/097,189
; EARLIER FILING DATE: 1998-08-20
; EARLIER APPLICATION NUMBER: 60/097,190
; EARLIER FILING DATE: 1998-08-20
; EARLIER APPLICATION NUMBER: 60/097,195
; EARLIER FILING DATE: 1998-08-20
; EARLIER APPLICATION NUMBER: 60/097,196
; EARLIER FILING DATE: 1998-08-20
; EARLIER APPLICATION NUMBER: 60/097,197
; EARLIER FILING DATE: 1998-08-20
; EARLIER APPLICATION NUMBER: 60/097,191
; EARLIER FILING DATE: 1998-08-27
; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 16
; LENGTH: 918
; TYPE: PRT
; ORGANISM: Chlamydia sp.
US-09-376-770-16

Query Match 1.3%; Score 12; DB 17; Length 918;
Best Local Similarity 100.0%; Pred. No. 0.18;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 615 LMGSFVDVRSIQ 626
|||||
DB 610 LMGSFVDVRSIQ 621

RESULT 44

US-09-446-677B-12
; Sequence 12, Application US/09446677B
; GENERAL INFORMATION:

APPLICANT: BIRKELUND, Svend
CHRISTIANSEN, Gunna
HEBSGAARD PEDERSEN, Anna-Sofie
MYGIND, Per
KNUDSEN, Katrine

TITLE OF INVENTION: SURFACE EXPOSED PROTEINS FROM CHLAMYDIA
PNEUMONIAE

NUMBER OF SEQUENCES: 30

CORRESPONDENCE ADDRESS:

ADDRESSEE: BROWDY AND NEIMARK, P.L.L.C.
STREET: 624 Ninth Street, N.W., Suite 300
CITY: Washington
STATE: D.C.
COUNTRY: USA
ZIP: 20001

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/446,677B

FILING DATE: 24-Mar-2000

PRIOR APPLICATION DATA:

APPLICATION NUMBER: PCT/DK98/00266

FILING DATE: 19-JUN-1998

APPLICATION NUMBER: DK 0744/97

FILING DATE: 23-JUN-1997

ATTORNEY/AGENT INFORMATION:

NAME: COOPER, Iver P.

REGISTRATION NUMBER: 28,005

REFERENCE/DOCKET NUMBER: BIRKELUND-1

TELECOMMUNICATION INFORMATION:

TELEPHONE: 202-628-5197

TELEFAX: 202-737-3528

INFORMATION FOR SEQ ID NO: 12:

SEQUENCE CHARACTERISTICS:

LENGTH: 918 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide

SEQUENCE DESCRIPTION: SEQ ID NO: 12:

US-09-446-677B-12

Query Match

Best Local Similarity 1.3%; Score 12; DB 18; Length 918;

Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 615 LMGSFVDVRSIQ 626

|||||

DB 610 LMGSFVDVRSIQ 621

RESULT 45

US-10-289-762-26

; Sequence 26, Application US/10289762

; GENERAL INFORMATION:

APPLICANT: Griflais, R.

TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, frag

TITLE OF INVENTION: thereof and uses thereof, in particular for the diagnosis, i

TITLE OF INVENTION: and treatment of infection

FILE REFERENCE: 9710-003-999

CURRENT APPLICATION NUMBER: US/10/289,762

CURRENT FILING DATE: 2003-03-27

NUMBER OF SEQ ID NOS: 6849

SEQ ID NO 26

LENGTH: 199

TYPE: PRT

ORGANISM: Chlamydia pneumoniae

US-10-289-762-26

Query Match

Best Local Similarity 1.1%; Score 10; DB 28; Length 199;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 319 GGAIATDSG 328

|||||

DB 70 GGAIATDSG 79

RESULT 46

US-09-791-537-61772

; Sequence 61772, Application US/09791537

; GENERAL INFORMATION:

APPLICANT: Bionomix, Inc.

APPLICANT: Debe, Derek

APPLICANT: Danzer, Joseph

TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY

TITLE OF INVENTION: METHODS OF USE THEREOF

FILE REFERENCE: 261/210

CURRENT APPLICATION NUMBER: US/09/791,537

CURRENT FILING DATE: 2001-02-22

NUMBER OF SEQ ID NOS: 153055

SOFTWARE: PatentIn version 3.0

SEQ ID NO 61772

LENGTH: 427

TYPE: PRT

ORGANISM: Chlamydophila pneumoniae

US-09-791-537-61772

Query Match

Best Local Similarity 1.1%; Score 10; DB 22; Length 427;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 416 IVFSGEKLSE 425
|||||
Db 412 IVFSGEKLSE 421

RESULT 47

US-10-289-762-31
; Sequence 31, Application US/10289762
; GENERAL INFORMATION:
; APPLICANT: Griflais, R.
; TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragments
; TITLE OF INVENTION: thereof and uses thereof, in particular for the diagnosis, prevention
; FILE REFERENCE: 9710-003-999
; CURRENT APPLICATION NUMBER: US/10/289,762
; CURRENT FILING DATE: 2003-03-27
; NUMBER OF SEQ ID NOS: 6849
; SEQ ID NO 31
; LENGTH: 427
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-10-289-762-31

Query Match 1.1%; Score 10; DB 28; Length 427;
Best Local Similarity 100.0%; Pred. No. 7.9;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 416 IVFSGEKLSE 425
|||||
Db 412 IVFSGEKLSE 421

RESULT 48

US-10-289-762-29
; Sequence 29, Application US/10289762
; GENERAL INFORMATION:
; APPLICANT: Griflais, R.
; TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragments
; TITLE OF INVENTION: thereof and uses thereof, in particular for the diagnosis, prevention
; FILE REFERENCE: 9710-003-999
; CURRENT APPLICATION NUMBER: US/10/289,762
; CURRENT FILING DATE: 2003-03-27
; NUMBER OF SEQ ID NOS: 6849
; SEQ ID NO 29
; LENGTH: 597
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-10-289-762-29

Query Match 1.1%; Score 10; DB 28; Length 597;
Best Local Similarity 100.0%; Pred. No. 11;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 648 SNFFHKDSTK 657
|||||
Db 499 SNFFHKDSTK 508

RESULT 49

US-09-438-185-18
; Sequence 18, Application US/09438185
; GENERAL INFORMATION:
; APPLICANT: Stephens, Richard
; APPLICANT: Mitchell, Wayne
; APPLICANT: Kalman, Sue
; APPLICANT: Davis, Ronald
; TITLE OF INVENTION: The Regents of the University of California
; TITLE OF INVENTION: Chlamydia Pneumoniae Genome Sequence
; FILE REFERENCE: 018941-000411US
; CURRENT APPLICATION NUMBER: US/09/438,185
; CURRENT FILING DATE: 1999-11-11
; PRIOR APPLICATION NUMBER: US 60/108,279

; PRIOR FILING DATE: 1998-11-12
; PRIOR APPLICATION NUMBER: US 60/128,606
; PRIOR FILING DATE: 1999-04-08
; NUMBER OF SEQ ID NOS: 1074
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 18
; LENGTH: 602
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-09-438-185-18

Query Match 1.1%; Score 10; DB 18; Length 602;
Best Local Similarity 100.0%; Pred. No. 11;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 416 IVFSGEKLSE 425
|||||
Db 423 IVFSGEKLSE 432

RESULT 50

US-09-438-185A-18
; Sequence 18, Application US/09438185A
; GENERAL INFORMATION:
; APPLICANT: Stephens, Richard
; APPLICANT: Mitchell, Wayne
; APPLICANT: Kalman, Sue
; APPLICANT: Davis, Ronald
; TITLE OF INVENTION: The Regents of the University of California
; TITLE OF INVENTION: Chlamydia Pneumoniae Genome Sequence
; FILE REFERENCE: 018941-000411US
; CURRENT APPLICATION NUMBER: US/09/438,185A
; CURRENT FILING DATE: 2002-03-13
; PRIOR APPLICATION NUMBER: US 60/108,279
; PRIOR FILING DATE: 1998-11-12
; PRIOR APPLICATION NUMBER: US 60/128,606
; PRIOR FILING DATE: 1999-04-08
; NUMBER OF SEQ ID NOS: 1074
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 18
; LENGTH: 602
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
; FEATURE:
; OTHER INFORMATION: CPn0016
US-09-438-185A-18

Query Match 1.1%; Score 10; DB 18; Length 602;
Best Local Similarity 100.0%; Pred. No. 11;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 416 IVFSGEKLSE 425
|||||
Db 423 IVFSGEKLSE 432

Search completed: August 22, 2003, 15:55:23
Job time : 381 secs

GenCore version 5.1.6

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OM protein - protein search, using sw model

Run on: August 22, 2003, 15:34:41 ; Search time 99 Seconds

(without alignments)

1487.861 Million cell updates/sec

Title: US-09-857-128-14

Perfect score: 928

Sequence: 1 MKSSLHWFLISSSLALPLSL.....MEIRGSSRSYNADLGKGFQF 928

Scoring table:

OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 1107863 seqs, 158726573 residues

Word size : 0

Total number of hits satisfying chosen parameters: 1107863

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 50 summaries

Database :

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24: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA2003.DAT.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Query	Score	Match	Length	ID	Description
1	928	100.0	928	21	AA190239	Chlamydia antigen
2	625	67.3	928	23	ABB90542	Chlamydia pneumonia
3	436	47.0	928	20	AAW88423	Chlamydia pneumonia
4	426	45.9	927	20	AA135054	Chlamydia pneumonia
5	16	1.7	930	20	AA135052	Chlamydia pneumonia
6	16	1.7	930	20	AAW88424	Chlamydia pneumonia
7	16	1.7	930	21	AA190240	Chlamydia antigen
8	16	1.7	930	23	ABB90548	Chlamydia pneumonia
9	12	1.3	354	23	ABB90533	Chlamydia pneumonia

10	12	1.3	507	20	AA134614	Chlamydia pneumonia
11	12	1.3	918	20	AAW88422	Chlamydia pneumonia
12	12	1.3	918	21	AA169369	Amino acid sequenc
13	10	1.1	199	20	AA134608	Chlamydia pneumonia
14	10	1.1	427	20	AA134613	Chlamydia pneumonia
15	10	1.1	597	20	AA134611	Chlamydia pneumonia
16	10	1.1	610	20	AAW88431	Chlamydia pneumonia
17	10	1.1	643	20	AA135056	Chlamydia pneumonia
18	10	1.1	746	23	ABB90535	Chlamydia psittaci
19	10	1.1	839	23	ABP56002	Chlamydia polypept
20	10	1.1	839	23	ABB98211	C. psittaci protei
21	10	1.1	839	24	ABU66267	Chlamydia pneumonia
22	10	1.1	841	20	AAW88420	C. pneumoniae CPN1
23	10	1.1	841	21	AA192818	Chlamydia antigen
24	10	1.1	841	23	ABB90595	Chlamydia pneumonia
25	10	1.1	885	21	AA190238	Mature Chlamydia a
26	10	1.1	914	20	AAW88429	Chlamydia pneumonia
27	10	1.1	928	20	AAW88418	Chlamydia pneumonia
28	10	1.1	928	20	AAW88421	Chlamydia antigen
29	10	1.1	928	21	AA190237	Chlamydia antigen
30	10	1.1	928	21	AA194327	Chlamydia pneumonia
31	10	1.1	928	23	ABB90573	Chlamydia pneumonia
32	9	1.0	212	20	AA137236	Chlamydia trachoma
33	9	1.0	325	20	AA116752	Chlamydia HMW prot
34	9	1.0	494	20	AA134615	Chlamydia pneumonia
35	9	1.0	494	23	ABB90592	Chlamydia pneumonia
36	9	1.0	671	20	AA135050	Chlamydia pneumonia
37	9	1.0	871	21	AA195550	Chlamydia pneumonia
38	9	1.0	925	21	AA199843	Chlamydia pneumonia
39	9	1.0	936	21	AA199842	Chlamydia pneumonia
40	9	1.0	936	23	ABB90602	Chlamydia pneumonia
41	9	1.0	945	20	AAW88428	Chlamydia pneumonia
42	9	1.0	945	21	AA169368	Amino acid sequenc
43	9	1.0	982	21	AA136333	C. trachomatis pmp
44	9	1.0	982	22	AA136320	Protein encoded by
45	9	1.0	982	23	ABB94172	Chlamydia protein
46	9	1.0	1006	21	AA136339	C. trachomatis pmp
47	9	1.0	1006	22	AA136320	Protein encoded by
48	9	1.0	1006	23	ABB94178	Chlamydia protein
49	9	1.0	1012	20	AA116735	C. trachomatis LGV
50	9	1.0	1013	20	AA116737	C. trachomatis B s

ALIGNMENTS

RESULT 1
ID AA190239 standard; Protein: 928 AA.
XX
AC AA190239;
XX
DT 29-AUG-2000 (first entry)
XX
DE Chlamydia antigen CPN100638.

XX Chlamydia antigen; diagnosis; infection; community acquired pneumonia;
KW therapy; upper respiratory tract disease; bronchitis; sinusitis;
KW asthmatic bronchitis; adult-onset asthma; acute exacerbations of asthma.

OS Chlamydia pneumoniae.

XX WO200032794-A2.

PD 08-JUN-2000.

XX 01-DEC-1999; 99WO-CA01147.

PR 01-DEC-1998; 98US-0110339.

PR 01-DEC-1998; 98US-0110340.

PR 01-DEC-1998; 98US-0110427.

PR 01-DEC-1998; 98US-0110428.

PR 01-DEC-1998; 98US-0110438.

XX PA (CONN-) CONNAUGHT LAB LTD.
XX PI Murdin AD, Oomen RP, Wang J;
XX PT N-PSDB: AAA30851, AAA30852.
XX DR WPI: 2000-412339/35.
XX DR N-PSDB: AAA30851, AAA30852.
XX PT Nucleic acids encoding polypeptide antigens from Chlamydia useful for
XX PT preventing, diagnosing and treating diseases such as community acquired
XX PT pneumonia, bronchitis, sinusitis and asthmatic bronchitis, adult-onset
XX PT asthma -
XX PS Claim 16; Fig 5; 174pp; English.
XX CC This sequence is a Chlamydia antigen of the invention, designated
XX CC CPN100638. The nucleic acids (and their complementary sequences) may be
XX CC used as diagnostic agents for detecting the presence of nucleic acids
XX CC encoding Chlamydia antigens in samples according to standard methods,
XX CC and therefore, for diagnosing Chlamydia infections. For example, they may
XX CC be used as primers and probes for diagnostic polymerase chain reaction
XX CC (PCR) assays. Antisense sequences may be used to down regulate
XX CC expression of the proteins and may be used to treat infections. The
XX CC nucleic acids may also be used to produce the protein antigens they
XX CC encode according to standard recombinant DNA methodologies. The
XX CC proteins may then be used as antigens for the production of antibodies
XX CC (i.e. as vaccines) for preventing infection by Chlamydia. The
XX CC antibodies may also be used as diagnostic reagents for detecting
XX CC infections. Chlamydia is a pathogen implicated in the development of
XX CC (for example) community acquired pneumonia, upper respiratory tract
XX CC disease (especially bronchitis and sinusitis, asthmatic bronchitis,
XX CC adult-onset asthma and acute exacerbations of asthma in adults.
XX CC
XX CC Sequence 928 AA;
XX CC
XX CC Query Match
XX CC Best Local Similarity 100.0%; Score 928; DB 21; Length 928;
XX CC Mismatches 928; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX CC
XX CC 1 MKSSLHWFLLISSSLALPLSLNFAFAAFAVEINLGNPTNSFGPGTTPPAQTNNADGTIN 60
XX CC 1 MKSSLHWFLLISSSLALPLSLNFAFAAFAVEINLGNPTNSFGPGTTPPAQTNNADGTIN 60
XX CC 61 LTGDSVITNAGSPTALTACFETKTNLSFQGHGYOFLQNDAGANCTFTTAAANKLLS 120
XX CC 61 LTGDSVITNAGSPTALTACFETKTNLSFQGHGYOFLQNDAGANCTFTTAAANKLLS 120
XX CC 121 FSGFSVLSLIQTNTATTGTAIKSTGACSIQSNYSYCYGQNPNDNGALQSSLSLSLN 180
XX CC 121 FSGFSVLSLIQTNTATTGTAIKSTGACSIQSNYSYCYGQNPNDNGALQSSLSLSLN 180
XX CC 181 PNLITAKNKATOKGALYSTGGITNTNLSASFSENTAANGGAIYFEASSFISNRAI 240
XX CC 181 PNLITAKNKATOKGALYSTGGITNTNLSASFSENTAANGGAIYFEASSFISNRAI 240
XX CC 241 SPINNSVTSATSGAIYCSSTAPKPVLTLSDNGLNFIQNTAITSGAIYTDNLVLS 300
XX CC 241 SPINNSVTSATSGAIYCSSTAPKPVLTLSDNGLNFIQNTAITSGAIYTDNLVLS 300
XX CC 301 GGPFTLFKNNSGDTAPLGGATAIADSGSLSLALGGDITFEGNTVVKGASSQTTTNS 360
XX CC 301 GGPFTLFKNNSGDTAPLGGATAIADSGSLSLALGGDITFEGNTVVKGASSQTTTNS 360
XX CC 361 INIGNTNAKIVOLRASQGNITFYDPIITTSITAALSDALNLPDLAGNPAYQGIYFSG 420
XX CC 361 INIGNTNAKIVOLRASQGNITFYDPIITTSITAALSDALNLPDLAGNPAYQGIYFSG 420
XX CC 421 EKLSEAEAAEADNLKSTIQOQUTLAGGQLSLKSGVTLVAKSFSPGSGTLLMDAGTTLET 480
XX CC 421 EKLSEAEAAEADNLKSTIQOQUTLAGGQLSLKSGVTLVAKSFSPGSGTLLMDAGTTLET 480
XX CC 481 ADGITINNVLNVDLSLKKETKATQASQTVTLSSLSLVDPSGNVYEDYSWNNPOVF 540
XX CC 481 ADGITINNVLNVDLSLKKETKATQASQTVTLSSLSLVDPSGNVYEDYSWNNPOVF 540

Db 481 ADGITINNVLNVDLSLKKETKATQASQTVTLSSLSLVDPSGNVYEDYSWNNPOVF 540
Qy 541 SCLTITADDPANIHITDLAADPLEKNPIHWGYOGNALSQWEDTATKSKAATLTWTKCY 600
Db 541 SCLTITADDPANIHITDLAADPLEKNPIHWGYOGNALSQWEDTATKSKAATLTWTKCY 600
Qy 601 NPNPERRGTLVANTLWGSFVDVRSIQOLVATKVRQSOETRTWICWEGISNFFHKDSTKINK 660
Db 601 NPNPERRGTLVANTLWGSFVDVRSIQOLVATKVRQSOETRTWICWEGISNFFHKDSTKINK 660
Qy 661 GFRHISAGYVVGATTTLASDNLITAAFCOLFGKDRDHFINKNKRASAYAAASHLQHLATLS 720
Db 661 GFRHISAGYVVGATTTLASDNLITAAFCOLFGKDRDHFINKNKRASAYAAASHLQHLATLS 720
Qy 721 SPSLLRYLPGSESEQPVLFDAQISYIYSKNTMKTYTTOAPKGESSWYNDGCALEASSLP 780
Db 721 SPSLLRYLPGSESEQPVLFDAQISYIYSKNTMKTYTTOAPKGESSWYNDGCALEASSLP 780
Qy 781 HTALSHEGLFHAYFPFIKVEASYIHQDSFKERNNTLVRSFSDGLINVSVPITGTFERFS 840
Db 781 HTALSHEGLFHAYFPFIKVEASYIHQDSFKERNNTLVRSFSDGLINVSVPITGTFERFS 840
Qy 841 RNERASYEATVIYVADVVRKNPDCDTALLINNTSWKTTGTNLSROAGIGRAGIFYAFSPN 900
Db 841 RNERASYEATVIYVADVVRKNPDCDTALLINNTSWKTTGTNLSROAGIGRAGIFYAFSPN 900
Qy 901 LEVTSNLSMEIRGSSRSYNADLGKGFQF 928
Db 901 LEVTSNLSMEIRGSSRSYNADLGKGFQF 928
RESULT 2
ABB90542
ID ABB90542 standard; Protein; 928 AA.
XX AC ABB90542;
XX DT 29-JUL-2002 (first entry)
XX Chlamydia pneumoniae cp6731 protein, SEQ ID NO:33.
DE Chlamydia pneumoniae cp6731 protein, SEQ ID NO:33.
XX Chlamydia pneumoniae cp6731 protein, SEQ ID NO:33.
KW Chlamydia pneumoniae cp6731 protein, SEQ ID NO:33.
KW Chlamydia pneumoniae cp6731 protein, SEQ ID NO:33.
KW Chlamydia pneumoniae cp6731 protein, SEQ ID NO:33.
KW Chlamydia pneumoniae cp6731 protein, SEQ ID NO:33.
XX Chlamydia pneumoniae.
OS Chlamydia pneumoniae.
XX Key Location/Qualifiers
FH Peptide 1..26
FT Protein 27..928
FT /note= "Mature protein"
XX WO200202606-A2.
PN 10-JAN-2002.
PD 10-JAN-2002.
XX 03-JUL-2001; 2001WO-IB01445.
PF 03-JUL-2001; 2001WO-IB01445.
PR 11-JUL-2000; 2000GB-0016363.
PR 21-JUL-2000; 2000GB-0017983.
PR 07-AUG-2000; 2000GB-0019368.
PR 18-AUG-2000; 2000GB-0020440.
PR 10-SEP-2000; 2000GB-0022583.
PR 10-NOV-2000; 2000GB-0027549.
PR 22-DEC-2000; 2000GB-0031706.
XX (CHIR-) CHIRON SPA.
XX Ratti G, Grandi G;
PI Ratti G, Grandi G;

XX WPI: 2002-154726/20.
 DR N-PSDB; ABL91200.
 XX
 XX Novel Chlamydia pneumoniae protein useful in the manufacture of a
 PT medicament for treatment or prevention of infection due to Chlamydia,
 PT preferably Chlamydia pneumoniae, and for diagnostic purposes
 XX
 PS Claim 1; Page 57; 364pp; English.
 XX
 CC Sequences ABB90526-ABB90715 represent novel proteins from Chlamydia
 CC pneumoniae (strain CWL029), and ABL91184-ABL91373 represent DNA encoding
 CC them. The proteins are predicted to be immunogenic and may therefore be
 CC useful in vaccine production and for diagnostic purposes. Chlamydia
 CC pneumoniae is a common cause of respiratory disease in humans, and is
 CC also involved in the development of cardiovascular diseases such as
 CC atherosclerosis, coronary artery disease, carotid artery stenosis,
 CC myocardial infarction, cerebrovascular disease, aortic aneurysm,
 CC claudication and stroke. The proteins and nucleic acids of the invention
 CC may be used in vaccines and pharmaceutical compositions for the
 CC prevention or treatment of chlamydial infections, particularly Chlamydia
 CC pneumoniae infections. The proteins may also be used in the detection of
 CC Chlamydia pneumoniae, and the nucleic acids may be used in the detection of
 CC Chlamydia pneumoniae, and the nucleic acids may be used in PCR, branched
 CC DNA probe assay or blotting techniques for determining Chlamydia
 CC pneumoniae gene expression. The present sequence represents a
 CC specifically claimed Chlamydia pneumoniae protein of the invention.
 XX
 SX Sequence 928 AA;
 SQ

Query Match 67.3%; Score 625; DB 23; Length 928;
 Best Local Similarity 99.7%; Pred. No. 0;
 Matches 925; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 MKSSLHFWLSSSLALPLSLNFAFAVVEINLGNPTNSFGPGTYTPPAQTNNADGTIYN 60
 DB 1 MKSSLHFWLSSSLALPLSLNFAFAVVEINLGNPTNSFGPGTYTPPAQTNNADGTIYN 60
 QY 61 LTGDVITNAGSPALTATSCFRETGNLFSQGHGYQFLQNDAGANCFTTANKLLS 120
 DB 61 LTGDVITNAGSPALTATSCFRETGNLFSQGHGYQFLQNDAGANCFTTANKLLS 120
 QY 121 FSGFSYLSLIQTNTATTGTAIKSTGACISQSNYSCYFQGNFSDNGGALQSSLSLSLN 180
 DB 121 FSGFSYLSLIQTNTATTGTAIKSTGACISQSNYSCYFQGNFSDNGGALQSSLSLSLN 180
 QY 181 PNLTFAKNKATOKGGALYSTGGITINNTLNSAFSENTAANGGAIYTEASSFISNKA 240
 DB 181 PNLTFAKNKATOKGGALYSTGGITINNTLNSAFSENTAANGGAIYTEASSFISNKA 240
 QY 241 SFINNSVTATSATGAIYCSSTAPKPVLTLSDNGLNFIQNTATTSGGAIYTDNLVLS 300
 DB 241 SFINNSVTATSATGAIYCSSTAPKPVLTLSDNGLNFIQNTATTSGGAIYTDNLVLS 300
 QY 301 GGPTLFKNNSGYDTAAPLGGAIAIADSGSLSLALGGDITFEQNTVWKGASSQTTRNS 360
 DB 301 GGPTLFKNNSGYDTAAPLGGAIAIADSGSLSLALGGDITFEQNTVWKGASSQTTRNS 360
 QY 361 INIGNTNAKIVOLRASOGNTIYFDPITTSITAALSDALNLPDLGNPAGVQGVIFSG 420
 DB 361 INIGNTNAKIVOLRASOGNTIYFDPITTSITAALSDALNLPDLGNPAGVQGVIFSG 420
 QY 421 EKLSEAEAEADNLKSTIOQPLTLAGGQLSLKSGVTLVAKSPSQSPGSTLLMDAGTTLET 480
 DB 421 EKLSEAEAEADNLKSTIOQPLTLAGGQLSLKSGVTLVAKSPSQSPGSTLLMDAGTTLET 480
 QY 481 ADGITINNLVNDLSKETKTKTLKATQASQTVTLSSLSLSDPNSGNYEDVSWNNPOVF 540
 DB 481 ADGITINNLVNDLSKETKTKTLKATQASQTVTLSSLSLSDPNSGNYEDVSWNNPOVF 540
 QY 541 SCLTTLTADDPANIHITLDAADPLEKNPIHWGYQGNWALSQWEDTATKSKAATLTWTKGY 600
 DB 541 SCLTTLTADDPANIHITLDAADPLEKNPIHWGYQGNWALSQWEDTATKSKAATLTWTKGY 600

QY 601 NPNPERRGTLVANTLWGSFVDVRSIQOOLVATKVRSOETRGIWCEGISNFFHKDSTKINK 660
 DB 601 NPNPERRGTLVANTLWGSFVDVRSIQOOLVATKVRSOETRGIWCEGISNFFHKDSTKINK 660
 QY 661 GFRHISAGYVVGATTTLASDNLITAAFCQIFGKDRDHFINKNRASAYAAASLHLQHLATLS 720
 DB 661 GFRHISAGYVVGATTTLASDNLITAAFCQIFGKDRDHFINKNRASAYAAASLHLQHLATLS 720
 QY 721 SPSLLRYLPGSESEOPVLFDAQISYISKNTWKTYTQAPKGSWYNDGCALEASSLP 780
 DB 721 SPSLLRYLPGSESEOPVLFDAQISYISKNTWKTYTQAPKGSWYNDGCALEASSLP 780
 QY 781 HTALSHEGLFHAYFFPIKVEASYIHQDSFKERTTLVRSFDSGLINVSVPITGIFERS 840
 DB 781 HTALSHEGLFHAYFFPIKVEASYIHQDSFKERTTLVRSFDSGLINVSVPITGIFERS 840
 QY 841 RNERASYEATVIYVADVVRKNDPCTTALLINNTSMKTTCTNLSRQAGIGRAGIFYAFSPN 900
 DB 841 RNERASYEATVIYVADVVRKNDPCTTALLINNTSMKTTCTNLSRQAGIGRAGIFYAFSPN 900
 QY 901 LEVTSNLSMEIRGSSRSYNADLGGKQFQ 928
 DB 901 LEVTSNLSMEIRGSSRSYNADLGGKQFQ 928

RESULT 3
 AAW88423
 ID AAW88423 standard; Protein; 928 AA.
 XX
 AC AAW88423;
 XX
 DT 26-APR-1999 (first entry)
 XX
 DE Chlamydia pneumoniae surface exposed protein Omp10.
 XX
 KW Omp10; outer membrane protein 10; surface exposed protein;
 KW antigen; infection; diagnosis; vaccine; atherosclerosis; asthma.
 XX
 OS Chlamydia pneumoniae.
 XX
 PN WO9858953-A2.
 XX
 PD 30-DEC-1998.
 XX
 PF 19-JUN-1998; 98WO-DK00266.
 XX
 PR 23-JUN-1997; 97DK-0000744.
 XX
 PA (BIRK/) BIRKELUND S.
 PA (CHRI/) CHRISTIANSEN G.
 PI Birkelund S, Christiansen G, Knudsen K, Madsen A;
 PI Mygind P;
 XX
 DR WPI: 1999-105610/09.
 DR N-PSDB; AAX06822.
 XX
 PT Species-specific test for identifying mammals infected with
 PT Chlamydia pneumoniae - comprises detecting antibodies specific for
 PT outer membrane proteins of C. pneumoniae or nucleic acids encoding
 PT these proteins
 PS
 PS Claim 7; Page 60-62; 115pp; English.
 CC
 CC This polypeptide comprises the novel 98.4 kDa surface exposed
 CC protein Omp10 of the human respiratory pathogen Chlamydia
 CC pneumoniae. Its amino acid sequence was deduced from DNA (see
 CC AAX06822) isolated from a C. pneumoniae expression library. The
 CC invention provides 12 novel surface exposed proteins, Omp4-Omp15
 CC (see AAW88417-28), and nucleic acid sequences encoding them (see
 CC AAX06816-27). A new species specific test is claimed that is used
 CC to identify mammals (including humans) infected with Chlamydia
 CC pneumoniae. The test comprises detecting antibodies specific for

CC Omp4-Omp15 or detecting nucleic acid fragments encoding these outer
 CC membrane proteins, especially by PCR. The proteins are also used
 CC in the diagnosis of *C. pneumoniae* infection in mammals. The
 CC nucleic acids and proteins can also be used in the immunization of
 CC mammals, the nucleic acids being particularly useful as DNA
 CC vaccines for effecting *in vivo* expression of antigens. The
 CC vaccines may also prevent atherosclerosis and bronchial asthma,
 CC which are possibly associated with *C. pneumoniae*.
 XX
 SQ Sequence 928 AA;

Query Match 47.0%; Score 436; DB 20; Length 928;
 Best Local Similarity 99.8%; Pred. No. 0;
 Matches 536; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 392 TAALSDALNLPDLAGNAYOGTIVFSGEKLSEAAEADNLKSTIQOPLLAGQLSL 451
 DB 392 TAALSDALNLPDLAGNAYOGTIVFSGEKLSEAAEADNLKSTIQOPLLAGQLSL 451
 QY 452 KSGVTLVAKSFQSPGSLTLLMDAGTTLETADGTTNNLVNVDLSKETKGLKATQASQ 511
 DB 452 KSGVTLVAKSFQSPGSLTLLMDAGTTLETADGTTNNLVNVDLSKETKGLKATQASQ 511
 QY 512 TVTLSSLSLVDPGNGVYEDVSWNNPQVFSCLTADDPANIHITDLAADPLEKPIHWG 571
 DB 512 TVTLSSLSLVDPGNGVYEDVSWNNPQVFSCLTADDPANIHITDLAADPLEKPIHWG 571
 QY 572 YOGNWLNSQEDTATKSKAATLTWTKGYNPNPERRGTLVANTLWGSFVDVRSIOQLVAT 631
 DB 572 YOGNWLNSQEDTATKSKAATLTWTKGYNPNPERRGTLVANTLWGSFVDVRSIOQLVAT 631
 QY 632 KVRQSOETRGICWEGISNFFHKDSTKINKGFRHISAGYVVGATTTLASDNLITAAFCOLF 691
 DB 632 KVRQSOETRGICWEGISNFFHKDSTKINKGFRHISAGYVVGATTTLASDNLITAAFCOLF 691
 QY 692 GKDRDHFINKNRASAYAAASHLQHLATLSSPLLRYLPGESEQPVLFDAQISYYSKNT 751
 DB 692 GKDRDHFINKNRASAYAAASHLQHLATLSSPLLRYLPGESEQPVLFDAQISYYSKNT 751
 QY 752 MKTYTQAPKGESSWYNDGCALELASSLPHTALSHGFLPHAYFPPIKVEASYIHODSFKE 811
 DB 752 MKTYTQAPKGESSWYNDGCALELASSLPHTALSHGFLPHAYFPPIKVEASYIHODSFKE 811
 QY 812 RNTTLVRSDGDLINVSVPIGITPERFRSRNERASYEATVIYVADYRKNPCTTALLIN 871
 DB 812 RNTTLVRSDGDLINVSVPIGITPERFRSRNERASYEATVIYVADYRKNPCTTALLIN 871
 QY 872 NTSWKTGTNLSRQAGIGRAGIFYAFSPNLEVTNLSMEIRGSSRSYNADLGGKQF 928
 DB 872 NTSWKTGTNLSRQAGIGRAGIFYAFSPNLEVTNLSMEIRGSSRSYNADLGGKQF 928

RESULT 4
 AAY35054
 ID AAY35054 standard; Protein; 927 AA.
 XX
 AC AAY35054;
 XX
 DT 13-SEP-1999 (first entry)
 XX
 DE Chlamydia pneumoniae surface exposed polypeptide.
 XX
 KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
 KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis;
 KW vaccine; neutralising epitope.
 XX
 OS Chlamydia pneumoniae.
 XX
 PN W09927105-A2.
 XX
 PD 03-JUN-1999.
 XX
 PF 20-NOV-1998; 98WO-IB01890.

XX
 PR 04-NOV-1998; 98US-0107078.
 PR 21-NOV-1997; 97FR-0014673.
 XX
 PA (GEST) GENSET.
 XX
 PI Griffais R;
 XX
 DR WPI; 1999-357842/30.
 XX
 PT Genome sequence of Chlamydia pneumoniae
 XX
 PS Page 942-944; Disclosure; 1912pp; English.
 XX
 CC AAY34584-Y35879 represent the proteins encoded by all the open reading
 CC frames in the complete genome (see AAX91990) of Chlamydia pneumoniae.
 CC *C. pneumoniae* causes respiratory disease such as pneumonia and
 CC bronchitis and is thought to be a contributing factor in heart
 CC disease, sarcoidosis, sinusitis, purulent otitis media, erythema
 CC nodosum or pharyngitis. The polypeptides encoded by the open reading
 CC frames of the *C. pneumoniae* genome (see AAY34584-Y35879) can be used in
 CC immunogenic compositions as vaccines. Vectors containing *C. pneumoniae*
 CC nucleotide sequences can also be used as immunogenic compositions,
 CC especially where the vector directs the expression of a neutralising
 CC epitope of *C. pneumoniae*.
 XX
 SQ Sequence 927 AA;

Query Match 45.9%; Score 426; DB 20; Length 927;
 Best Local Similarity 100.0%; Pred. No. 0;
 Matches 426; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 503 TLKATQASQTVTLSSLSLVDPGNGVYEDVSWNNPQVFSCLTADDPANIHITDLAADP 562
 DB 503 TLKATQASQTVTLSSLSLVDPGNGVYEDVSWNNPQVFSCLTADDPANIHITDLAADP 561
 QY 563 LEKNPIHWGOGNWLNSQEDTATKSKAATLTWTKGYNPNPERRGTLVANTLWGSFVDV 622
 DB 563 LEKNPIHWGOGNWLNSQEDTATKSKAATLTWTKGYNPNPERRGTLVANTLWGSFVDV 621
 QY 623 RSIQOLVATKVRQSOETRGICWEGISNFFHKDSTKINKGFRHISAGYVVGATTTLASDNL 682
 DB 623 RSIQOLVATKVRQSOETRGICWEGISNFFHKDSTKINKGFRHISAGYVVGATTTLASDNL 681
 QY 683 ITAFCOLFGRDROHFINKNRASAYAAASHLQHLATLSSPLLRYLPGESEQPVLFDAQ 742
 DB 683 ITAFCOLFGRDROHFINKNRASAYAAASHLQHLATLSSPLLRYLPGESEQPVLFDAQ 741
 QY 743 ISYYSKNTMTYTTQAPKGESSWYNDGCALELASSLPHTALSHGFLPHAYFPPIKVEAS 802
 DB 743 ISYYSKNTMTYTTQAPKGESSWYNDGCALELASSLPHTALSHGFLPHAYFPPIKVEAS 801
 QY 803 YIHODSFKEKNTTLVRSDGDLINVSVPIGITPERFRSRNERASYEATVIYVADYRKNP 862
 DB 803 YIHODSFKEKNTTLVRSDGDLINVSVPIGITPERFRSRNERASYEATVIYVADYRKNP 861
 QY 863 DCTTALLINNTSWKTGTNLSRQAGIGRAGIFYAFSPNLEVTNLSMEIRGSSRSYNADL 922
 DB 863 DCTTALLINNTSWKTGTNLSRQAGIGRAGIFYAFSPNLEVTNLSMEIRGSSRSYNADL 921
 QY 923 GGKQF 928
 DB 923 GGKQF 927

RESULT 5
 AAY35052
 ID AAY35052 standard; Protein; 930 AA.
 XX
 AC AAY35052;
 XX
 DT 13-SEP-1999 (first entry)
 XX

DE Chlamydia pneumoniae surface exposed polypeptide.
 XX Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
 KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis;
 KW vaccine; neutralising epitope.
 XX Chlamydia pneumoniae.
 OS WO9927105-A2.
 XX
 PN 03-JUN-1999.
 XX
 PD 20-NOV-1998; 98WO-IB01890.
 XX
 PF 04-NOV-1998; 98US-0107078.
 XX
 PR 21-NOV-1997; 97FR-0014673.
 XX
 XX (GEST) GENSET.
 PA Griffais R;
 XX
 PI WPI; 1999-357842/30.
 XX
 DR Genome sequence of Chlamydia pneumoniae
 XX
 PS Page 940-942; Disclosure; 1912pp; English.
 XX
 CC AAY34584-Y35879 represent the proteins encoded by all the open reading
 CC frames in the complete genome (see AAY91990) of Chlamydia pneumoniae.
 CC C. pneumoniae causes respiratory disease such as pneumonia and
 CC bronchitis and is thought to be a contributing factor in heart
 CC disease, sarcoidosis, sinusitis, purulent otitis media, erythema
 CC nodosum or pharyngitis. The polypeptides encoded by the open reading
 CC frames of the C. pneumoniae genome (see AAY34584-Y35879) can be used in
 CC immunogenic compositions as vaccines. Vectors containing C. pneumoniae
 CC nucleotide sequences can also be used as immunogenic compositions,
 CC especially where the vector directs the expression of a neutralising
 CC epitope of C. pneumoniae.
 XX
 SQ Sequence 930 AA;
 Query Match 1.7%; Score 16; DB 20; Length 930;
 Best Local Similarity 100.0%; Pred. No. 2.2e-06;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 319 GGATATADSGSLSLA 334
 Db 324 GGATATADSGSLSLA 339
 RESULT 6
 AAW88424
 ID AAW88424 standard; Protein; 930 AA.
 XX
 AC AAW88424;
 XX
 DT 26-APR-1999 (first entry)
 XX
 DE Chlamydia pneumoniae surface exposed protein Omp1.
 XX
 KW Omp1; outer membrane protein 11; surface exposed protein;
 KW antigen; infection; diagnosis; vaccine; atherosclerosis; asthma.
 XX Chlamydia pneumoniae.
 OS
 XX WO9858953-A2.
 PN
 XX 30-DEC-1998.
 XX
 PD 19-JUN-1998; 98WO-DK00266.
 XX
 PF 23-JUN-1997; 97DK-0000744.
 XX
 PR
 XX

PA (BIRK/) BIRKELUND S.
 XX (CHRI/) CHRISTIANSEN G.
 PI Birkelund S, Christiansen G, Knudsen K, Madsen A;
 PI Mygind P;
 XX
 DR WPI; 1999-105610/09.
 DR N-PSDB; AAX06823.
 XX
 PT Species-specific test for identifying mammals infected with
 PT Chlamydia pneumoniae - comprises detecting antibodies specific for
 PT outer membrane proteins of C. pneumoniae or nucleic acids encoding
 PT these proteins
 XX
 PS Claim 7; Page 63-65; 115pp; English.
 XX
 CC This polypeptide comprises the novel 97.6 kDa surface exposed
 CC protein Omp11 of the human respiratory pathogen Chlamydia
 CC pneumoniae. Its amino acid sequence was deduced from DNA (see
 CC AAX06823) isolated from a C. pneumoniae expression library. The
 CC invention provides 12 novel surface exposed proteins, Omp4-Omp15
 CC (see AAW8417-28), and nucleic acid sequences encoding them (see
 CC AAX06816-27). A new species specific test is claimed that is used
 CC to identify mammals (including humans) infected with Chlamydia
 CC pneumoniae. The test comprises detecting antibodies specific for
 CC Omp4-Omp15 or detecting nucleic acid fragments encoding these outer
 CC membrane proteins, especially by PCR. The proteins are also used
 CC in the diagnosis of C. pneumoniae infection in mammals. The
 CC nucleic acids and proteins can also be used in the immunization of
 CC mammals, the nucleic acids being particularly useful as DNA
 CC vaccines for effecting in vivo expression of antigens. The
 CC vaccines may also prevent atherosclerosis and bronchial asthma,
 CC which are possibly associated with C. pneumoniae.
 XX
 SQ Sequence 930 AA;
 Query Match 1.7%; Score 16; DB 20; Length 930;
 Best Local Similarity 100.0%; Pred. No. 2.2e-06;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 319 GGATATADSGSLSLA 334
 Db 324 GGATATADSGSLSLA 339
 RESULT 7
 AAY90240
 ID AAY90240 standard; Protein; 930 AA.
 XX
 AC AAY90240;
 XX
 DT 29-AUG-2000 (first entry)
 XX
 DE Chlamydia antigen CPN100639.
 XX
 KW Chlamydia antigen; diagnosis; infection; community acquired pneumonia;
 KW therapy; upper respiratory tract disease; bronchitis; sinusitis;
 KW asthmatic bronchitis; adult-onset asthma; acute exacerbations of asthma.
 XX Chlamydia pneumoniae.
 OS
 XX WO200032794-A2.
 PN
 XX 08-JUN-2000.
 PD
 XX
 PF 01-DEC-1999; 99WO-CA01147.
 XX
 PR 01-DEC-1998; 98US-0110339.
 PR 01-DEC-1998; 98US-0110340.
 PR 01-DEC-1998; 98US-0110427.
 PR 01-DEC-1998; 98US-0110428.
 PR 01-DEC-1998; 98US-0110438.
 XX

PA (CONN-) CONNAUGHT LAB LTD.
 XX Murdin AD, Oomen RP, Wang J;
 XX WPI: 2000-412339/35,
 DR N-PSDB; AAA30853, AAA30854.
 XX
 PT Nucleic acids encoding polypeptide antigens from Chlamydia useful for
 PT preventing, diagnosing and treating diseases such as community acquired
 PT pneumonia, bronchitis, sinusitis and asthmatic bronchitis, adult-onset
 PT asthma -
 XX
 XX Claim 16; Fig 7; 174pp; English.
 XX
 CC This sequence is a Chlamydia antigen of the invention, designated
 CC CPN100639. The nucleic acids (and their complementary sequences) may be
 CC used as diagnostic agents for detecting the presence of nucleic acids
 CC encoding Chlamydia antigens in samples according to standard methods,
 CC and therefore, for diagnosing Chlamydia infections. For example, they may
 CC be used as primers and probes for diagnostic polymerase chain reaction
 CC (PCR) assays. Antisense sequences may be used to down regulate
 CC expression of the proteins and may be used to treat infections. The
 CC nucleic acids may also be used to produce the protein antigens they
 CC encode according to standard recombinant DNA methodologies. The
 CC proteins may then be used as antigens for the production of antibodies
 CC (i.e. as vaccines) for preventing infection by Chlamydia. The
 CC antibodies may also be used as diagnostic reagents for detecting
 CC infections. Chlamydia is a pathogen implicated in the development of
 CC (for example) community acquired pneumonia, upper respiratory tract
 CC disease (especially bronchitis and sinusitis, asthmatic bronchitis,
 CC adult-onset asthma and acute exacerbations of asthma in adults.
 XX
 SQ Sequence 930 AA;
 Query Match 1.7%; Score 16; DB 21; Length 930;
 Best Local Similarity 100.0%; Pred. No. 2.2e-06;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 319 GGATATADSGSLSLA 334
 Db 324 GGATATADSGSLSLA 339
 RESULT 8
 ABB90548
 ID ABB90548 standard; Protein; 930 AA.
 XX
 AC ABB90548;
 XX
 DT 29-JUL-2002 (first entry)
 XX
 DE Chlamydia pneumoniae cp6729 protein, SEQ ID NO:45.
 XX
 KW Chlamydial infection; antigen; immunogen; vaccine; diagnosis;
 KW human respiratory disease; cardiovascular disease; atherosclerosis;
 KW coronary artery disease; carotid artery stenosis; myocardial infarction;
 KW cerebrovascular disease; aortic aneurysm; claudication; stroke;
 KW strain CWL029.
 XX
 OS Chlamydia pneumoniae.
 XX
 FH Key Location/Qualifiers
 FT Peptide 1..26
 FT /label= signal_peptide
 FT Protein 27..930
 FT /note= "Mature protein"
 XX
 PN WO200202606-A2.
 XX
 PD 10-JAN-2002.
 XX
 PF 03-JUL-2001; 2001WO-IB01445.
 XX

PR 03-JUL-2003; 2000GB-0016363.
 PR 11-JUL-2004; 2000GB-0017047.
 PR 21-JUL-2000; 2000GB-0017983.
 PR 07-AUG-2000; 2000GB-0019368.
 PR 18-AUG-2000; 2000GB-0020440.
 PR 14-SEP-2000; 2000GB-0022583.
 PR 10-NOV-2000; 2000GB-0027549.
 PR 22-DEC-2000; 2000GB-0031706.
 XX (CHIR-) CHIRON SPA.
 PA
 XX Ratti G, Grandi G;
 XX WPI: 2002-154726/20.
 DR N-PSDB; ABL91206.
 XX
 PT Novel Chlamydia pneumoniae protein useful in the manufacture of a
 PT medicament for treatment or prevention of infection due to Chlamydia,
 PT preferably Chlamydia pneumoniae, and for diagnostic purposes -
 XX
 XX Claim 1; Page 64; 364pp; English.
 CC Sequences ABB90526-ABB90715 represent novel proteins from Chlamydia
 CC pneumoniae (strain CWL029), and ABL91184-ABL91373 represent DNA encoding
 CC them. The proteins are predicted to be immunogenic and may therefore be
 CC useful in vaccine production and for diagnostic purposes. Chlamydia
 CC pneumoniae is a common cause of respiratory disease in humans, and is
 CC also involved in the development of cardiovascular diseases such as
 CC atherosclerosis, coronary artery disease, carotid artery stenosis,
 CC myocardial infarction, cerebrovascular disease, aortic aneurysm,
 CC claudication and stroke. The proteins and nucleic acids of the invention
 CC may be used in vaccines and pharmaceutical compositions for the
 CC prevention or treatment of chlamydial infections, particularly Chlamydia
 CC pneumoniae infections. The proteins may also be used in the detection of
 CC Chlamydia pneumoniae, and the nucleic acids may be used in PCR, branched
 CC DNA probe assay or blotting techniques for determining Chlamydia
 CC pneumoniae gene expression. The present sequence represents a
 CC specifically claimed Chlamydia pneumoniae protein of the invention.
 XX
 SQ Sequence 930 AA;
 Query Match 1.7%; Score 16; DB 23; Length 930;
 Best Local Similarity 100.0%; Pred. No. 2.2e-06;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 319 GGATATADSGSLSLA 334
 Db 324 GGATATADSGSLSLA 339
 RESULT 9
 ABB90533
 ID ABB90533 standard; Protein; 354 AA.
 XX
 AC ABB90533;
 XX
 DT 29-JUL-2002 (first entry)
 XX
 DE Chlamydia pneumoniae cp0017 protein, SEQ ID NO:15.
 XX
 KW Chlamydial infection; antigen; immunogen; vaccine; diagnosis;
 KW human respiratory disease; cardiovascular disease; atherosclerosis;
 KW coronary artery disease; carotid artery stenosis; myocardial infarction;
 KW cerebrovascular disease; aortic aneurysm; claudication; stroke;
 KW strain CWL029.
 XX
 OS Chlamydia pneumoniae.
 XX
 PN WO200202606-A2.
 XX
 PD 10-JAN-2002.
 XX
 PF 03-JUL-2001; 2001WO-IB01445.

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XX 03-JUL-2000; 2000GB-0016363.
PR 11-JUL-2000; 2000GB-0017047.
PR 21-JUL-2000; 2000GB-0017983.
PR 07-AUG-2000; 2000GB-0019368.
PR 18-AUG-2000; 2000GB-0020440.
PR 14-SEP-2000; 2000GB-0022583.
PR 10-NOV-2000; 2000GB-0027549.
PR 22-DEC-2000; 2000GB-0031706.
XX (CHIR-) CHIRON SPA.
PA
XX
XX Ratti G, Grandi G;
XX
DR WPI; 2002-154726/20.
DR N-PSDB; ABL91191.
XX
PT Novel Chlamydia pneumoniae protein useful in the manufacture of a
PT medicament for treatment or prevention of infection due to Chlamydia,
PT preferably Chlamydia pneumoniae, and for diagnostic purposes -
XX
PS Claim 1; Page 48; 364pp; English.
XX
CC Sequences ABB90576-ABB90715 represent novel proteins from Chlamydia
CC pneumoniae (strain CWL029), and ABL91184-ABL91373 represent DNA encoding
CC them. The proteins are predicted to be immunogenic and may therefore be
CC useful in vaccine production and for diagnostic purposes. Chlamydia
CC pneumoniae is a common cause of respiratory disease in humans, and is
CC also involved in the development of cardiovascular diseases such as
CC atherosclerosis, coronary artery disease, carotid artery stenosis,
CC myocardial infarction, cerebrovascular disease, aortic aneurysm,
CC claudication and stroke. The proteins and nucleic acids of the invention
CC may be used in vaccines and pharmaceutical compositions for the
CC prevention or treatment of chlamydial infections, particularly Chlamydia
CC pneumoniae infections. The proteins may also be used in the detection of
CC Chlamydia pneumoniae, and the nucleic acids may be used in PCR, branched
CC DNA probe assay or blotting techniques for determining Chlamydia
CC pneumoniae gene expression. The present sequence represents a
CC specifically claimed Chlamydia pneumoniae protein of the invention.
XX
SQ Sequence 354 AA;
    Query Match 1.3%; Score 12; DB 23; Length 354;
    Best Local Similarity 100.0%; Pred. No. 0.0084;
    Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 615 LMGSFVDVRSIQ 626
Db 46 LMGSFVDVRSIQ 57

RESULT 10
AAV34614
ID AAV34614 standard; Protein; 507 AA.
XX
AC AAV34614;
XX
XX 13-SEP-1999 (first entry)
XX
DE Chlamydia pneumoniae transmembrane protein sequence.
XX
KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis;
KW vaccine; neutralising epitope.
XX
OS Chlamydia pneumoniae.
XX
FN WO9927105-A2.
XX
PD 03-JUN-1999.
XX
PF 20-NOV-1998; 98WO-IB01890.
XX

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PR 04-NOV-1998; 98US-0107078.
PR 21-NOV-1997; 97ER-0014673.
XX
PA (GEST ) GENSET.
XX
PI Griffais R;
XX
XX WPI; 1999-357842/30.
XX
XX Genome sequence of Chlamydia pneumoniae
XX
XX Page 534-635; Disclosure; 1912pp; English.
XX
CC AAY34584-Y35879 represent the proteins encoded by all the open reading
CC frames in the complete genome (see AAX91990) of Chlamydia pneumoniae.
CC C. pneumoniae causes respiratory disease such as pneumonia and
CC bronchitis and is thought to be a contributing factor in heart
CC disease, sarcoidosis, sinusitis, purulent otitis media, erythema
CC nodosum or pharyngitis. The polypeptides encoded by the open reading
CC frames of the C. pneumoniae genome (see AAY34584-Y35879) can be used in
CC immunogenic compositions as vaccines. Vectors containing C. pneumoniae
CC nucleotide sequences can also be used as immunogenic compositions,
CC especially where the vector directs the expression of a neutralising
CC epitope of C. pneumoniae.
XX
SQ Sequence 507 AA;
    Query Match 1.3%; Score 12; DB 20; Length 507;
    Best Local Similarity 100.0%; Pred. No. 0.012;
    Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 615 LMGSFVDVRSIQ 626
Db 199 LMGSFVDVRSIQ 210

RESULT 11
AAW88422
ID AAW88422 standard; Protein; 918 AA.
XX
AC AAW88422;
XX
XX 26-APR-1999 (first entry)
XX
DE Chlamydia pneumoniae surface exposed protein Omp9.
XX
KW Omp9; outer membrane protein 9; surface exposed protein; antigen;
KW infection; diagnosis; vaccine; atherosclerosis; asthma.
XX
OS Chlamydia pneumoniae.
XX
XX WO9858953-A2.
XX
PD 30-DEC-1998.
XX
XX 19-JUN-1998; 98WO-DK00266.
XX
XX 23-JUN-1997; 97DK-0000744.
XX
PA (BIRK/) BIRKELUND S.
PA (CHRI/) CHRISTIANSEN G.
XX
PI Birkelund S, Christiansen G, Knudsen K, Madsen A;
PI Mygind P;
XX
XX WPI; 1999-105610/09.
XX
DR N-PSDB; AAX06821.
XX
PT Species-specific test for identifying mammals infected with
PT Chlamydia pneumoniae - comprises detecting antibodies specific for
PT outer membrane proteins of C. pneumoniae or nucleic acids encoding
PT these proteins
XX

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PS Claim 7; Page 56-58; 115pp; English.

XX This polypeptide comprises the novel 96.7 kDa surface exposed
 CC protein Omp9 of the human respiratory pathogen Chlamydia
 CC pneumoniae. Its amino acid sequence was deduced from DNA (see
 CC AX05821) isolated from a C. pneumoniae expression library. The
 CC invention provides 12 novel surface exposed proteins, Omp4-Omp15
 CC (see AA088417-28), and nucleic acid sequences encoding them (see
 CC AX05816-27). A new species specific test is claimed that is used
 CC to identify mammals (including humans) infected with Chlamydia
 CC pneumoniae. The test comprises detecting antibodies specific for
 CC Omp4-Omp15 or detecting nucleic acid fragments encoding these outer
 CC membrane proteins, especially by PCR. The proteins are also used
 CC in the diagnosis of C. pneumoniae infection in mammals. The
 CC nucleic acids and proteins can also be used in the immunization of
 CC mammals, the nucleic acids being particularly useful as DNA
 CC vaccines for effecting in vivo expression of antigens. The
 CC vaccines may also prevent atherosclerosis and bronchial asthma,
 CC which are possibly associated with C. pneumoniae.

XX

SQ Sequence 918 AA;

Query Match 1.3%; Score 12; DB 20; Length 918;
 Best Local Similarity 100.0%; Pred. No. 0.02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 615 LMGSFVDVRSIQ 626
 |||||

Db 610 LMGSFVDVRSIQ 621

RESULT 12

AA059369

ID AAY69369 standard; Protein; 918 AA.

XX

AC AAY69369;

XX

DT 19-JUN-2000 (first entry)

XX

DE Amino acid sequence of the CPN100395 polypeptide.

XX

KW CPN100395; Chlamydia infection; immune response; vaccine.

XX

OS Chlamydia pneumoniae.

XX

PN WO200011183-A2.

XX

PD 02-MAR-2000.

XX

PF 18-AUG-1999; 99WO-IB01449.

XX

PR 20-AUG-1998; 98US-0097187.

PR 20-AUG-1998; 98US-0097188.

PR 20-AUG-1998; 98US-0097189.

PR 20-AUG-1998; 98US-0097190.

PR 20-AUG-1998; 98US-0097195.

PR 20-AUG-1998; 98US-0097196.

PR 20-AUG-1998; 98US-0097197.

PR 27-AUG-1998; 98US-0097191.

PR 17-AUG-1999; 99US-0376770.

XX

PA (CONN-) CONNAUGHT LAB LTD.

XX

PI Murdin AD, Owen RP;

XX

DR WPI: 2000-224703/19.

DR N-PSDB; AA61509.

XX

PT Novel antigens and corresponding DNA molecules that can be used to
 prevent, treat and diagnose disease caused by Chlamydia infection in
 PT mammals, especially humans -

XX

PS Claim 19; Fig 15-E; 201pp; English.

XX

CC AAY69362-69 represent Chlamydia pneumoniae polypeptides. The
 CC polypeptides are present in the bacterial membrane structure, in the
 CC external vicinity of the membrane structure, in the inclusion membrane
 CC structure, in the external vicinity of the inclusion membrane structure,
 CC and in the cytoplasm of the infected cell. The polypeptides may be
 CC used to prevent, treat and detect the presence of Chlamydia infection
 CC and/or the presence of Chlamydia in a sample. The polypeptides may
 CC also be used to induce an immune response in a mammal. The vaccine
 CC vector comprising the polynucleotides is used to induce an immune
 CC response in a mammal. Antibodies directed against the polypeptides
 CC may also be used therapeutically to treat and/or prevent a Chlamydia
 CC infection.

XX

SQ Sequence 918 AA;

Query Match 1.3%; Score 12; DB 21; Length 918;
 Best Local Similarity 100.0%; Pred. No. 0.02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 615 LMGSFVDVRSIQ 626
 |||||

Db 610 LMGSFVDVRSIQ 621

RESULT 13

AA0534608

ID AAY34608 standard; Protein; 199 AA.

XX

AC AAY34608;

XX

DT 13-SEP-1999 (first entry)

XX

DE Chlamydia pneumoniae surface exposed polypeptide.

XX

KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
 KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis;
 KW vaccine; neutralising epitope.

XX

OS Chlamydia pneumoniae.

XX

PN WO9927105-A2.

XX

PD 03-JUN-1999.

XX

PF 20-NOV-1998; 98WO-IB01890.

XX

PR 04-NOV-1998; 98US-0107078.

PR 21-NOV-1997; 97FR-0014673.

XX

PA (GEST) GENSET.

XX

PI Griffiths R;

XX

DR WPI: 1999-357842/30.

XX

PT Genome sequence of Chlamydia pneumoniae

XX

PS Page 630; Disclosure; 1912pp; English.

XX

CC AAY34584-Y35879 represent the proteins encoded by all the open reading
 CC frames in the complete genome (see AAX91990) of Chlamydia pneumoniae.
 CC C. pneumoniae causes respiratory disease such as pneumonia and
 CC bronchitis and is thought to be a contributing factor in heart
 CC disease, sarcoidosis, sinusitis, purulent otitis media, erythema
 CC nodosum or pharyngitis. The polypeptides encoded by the open reading
 CC frames of the C. pneumoniae genome (see AAY34584-Y35879) can be used in
 CC immunogenic compositions as vaccines. Vectors containing C. pneumoniae
 CC nucleotide sequences can also be used as immunogenic compositions,
 CC especially where the vector directs the expression of a neutralising
 CC epitope of C. pneumoniae.

XX

SQ Sequence 199 AA;